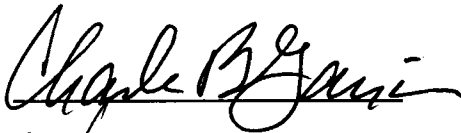


To the Graduate Council:

I am submitting herewith a dissertation written by Michael Joseph Hicks entitled "Hierarchial Delays as a Source of Sticky Prices: Evidence From Two Workably Competitive Industries." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Economics.

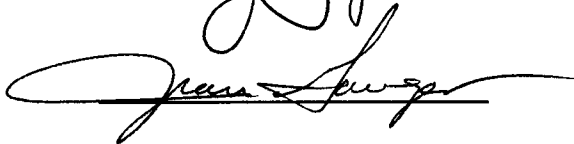

Sidney Carroll, Major Professor

We have read this dissertation
and recommend its acceptance:









Accepted for the Council:


Associate Vice Chancellor and
Dean of The Graduate School

**Hierarchical Delays as a Source of Sticky Prices:
Evidence From Two Workably Competitive Industries**

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Michael Joseph Hicks

August 1998

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This dissertation is dedicated:

to absent friends, and serving comrades whose
sacrifice made this possible,

Helen and George Thomas,
whose constant, steady encouragement,
kept my feet to the fire

to my parents, Wanda and John Hicks whose
example, constant reassurance and love,
allowed me to dream with both feet on the ground

and especially Janet, whose love letters continue to
provide all the inspiration to write I shall ever need.

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ABSTRACT

The purpose of this dissertation is to empirically examine two industries for evidence of hierarchial delays in price setting and related phenomenon, especially staggered price setting. To do so, I begin by explaining the relevance of both nominal price rigidities and staggered price setting to a New Keynesian model of the macroeconomy. Areas of potential research into this phenomena as well a map for selecting the appropriate markets is included. This is followed by a basic model of the firm in which informational delays and decision costs form the basis of an examination of firm behavior that relies on bounded rationality to generate hierarchial delays. Extensions of the model include multiproduct firms, and information impactedness. The modeling process falls within the framework of the New Institutional economics.

The markets selected for empirical analysis are the microcomputer market from 1993-1995 and the Colorado Wholesale Wine Market during 1996. In both markets, product price changes are analyzed for evidence of inter and intra firm synchronization in price setting, finding asynchronous price adjustment in both industries employing a number of criteria. The frequency of price adjustment, as a dependent variable suggesting hierarchial delays, is tested on a variety of firm level explanatory variables related to hierarchy size. The econometric technique of note is an information complexity approach to model selection under conditions of extreme multicollinearity suggested by Bozdogan [1996]. The findings are that the frequency of price adjustment is negatively correlated with measures of firm size, and positively correlated with proxies of the ease of decisionmaking in firms. This strongly suggests that price decisions are subject to

hierarchical delays that generate nominal price rigidities of macroeconomic consequence.

Conclusions of this research include a rejection of the neutrality of money and strong evidence of hierarchical delays in firms. Further research is suggested, including a need for informational aspects of firm behavior to be studied in greater depth and research into firm level behavior within the context of hierarchies.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

The speed with which industrial markets clear—or whether they clear at all—is of keen interest to applied microeconomists. Despite this strong interest, especially among industrial organization economists, there remains a real shortage of research into this phenomenon employing novel, firm level data. Indeed, recent critics of the current state of firm level empirical research include two Nobel Laureates, Ronald Coase [1991] and Herbert Simon [1997]. Macroeconomists are also concerned with the market clearing behavior of industrial markets, in their aggregate form. Indeed, it is in the selection of the representative firm behavior that underlies much of the current debate as to the efficacy of competing models of the aggregate economy.

The leading New Classical model, the Real Business Cycle model (RBC) like the earlier stochastic models of Friedman and Lucas, employs a representative firm that operates in a perfectly competitive environment. This results in continuous market clearing in the goods and labor markets. Hence business cycle activity is generated by optimal agent response to unexpected changes in the price level—the now famous leisure/labor decision. An alternate model, offered by New Keynesians, suggests a starkly contrasting explanation of cyclical fluctuations, the inability of markets to clear due to a variety of microeconomic phenomenon, among which is sticky prices.

The basis for discord between these models lies in the choice of behavioral characteristics of the representative firm, especially the degree of flexibility of wages and prices.¹ It is in addressing the nature of the firm to be chosen as representative that is the heart of the macroeconomic relevance of this dissertation.

Unfortunately, most microeconomic research in this area has tread close to the path of least resistance in that it has sought price stickiness in the least competitive of markets. These are the very type our astute New Classicalist would reject as a temporal phenomenon, or one to which more limited policy options—in the form of competition laws—should address (see discussion by Martin, 1993, pp 5-6).

So, New Keynesians must take the debate to the New Classicalist's last refuge, the nature of their representative firm, the competitive market. Here careful terminology is critical to bridging the gap between price theorists and macroeconomists. The traditional competitive model remains what it has lately been, a benchmark of efficiency, with perfectly elastic firm level demand curves and continuous market clearing; the perfect Walrasian description of a market. I shall try to demonstrate that firms which deviate only slightly from traditional perfect competition *may* have sticky prices.

When markets deviate slightly from the world of the traditional model into the world of continuous degrees of competition, bounded $[0,1]$, we enter the research realm of the industrial organization economist who employs a variety of market structure-conduct-performance tools to evaluate the degree of competition in actual markets. The

¹The terms inflexible, rigid and sticky are used synonymously in this dissertation, along with price inertia to describe non-Walrasian adjustment of prices.

easy assertion of a single representative firm is temporarily cast aside in favor of markets with a variety of characteristics.

It is in the realm of workable or effective competition that the microeconomist must toil.² It is the pricing behavior evident in firms very near the competitive representation used in New Classical models that must be explored. The search for price stickiness must then begin very close to the ideal representation of perfect competition, and then be extended to less competitive firms.

A result of this research then is to replace the New Classical assumption of pricing behavior with empirical evidence of sticky prices. If sticky prices are found in relatively competitive markets, no longer can the traditional competitive model be realistically employed as a representative firm. Few firms behave "as if" they were perfectly competitive in the real sense that they adjust prices continuously. Hence, the degree of competition in markets to be empirically examined must be established.

In this dissertation I shall investigate industries that are workably competitive, whose firms are behaviorally close to the ideal traditional model of competition. Indeed, a New Classical macroeconomist may even choose the markets I will analyze as near their ideal representation; however, I will illustrate that price inertia exists in these markets. So, even if New Classicalists choose firms *near* perfect competition, the assumption of flexible prices and continuous market clearing is inappropriate. If prices are rigid in workably competitive markets, they must be sticky in the majority of less competitive markets as well—the bulk of the economy. This finding should guide the macroeconomic

²*Workable competition* (J.M. Clarke, 1946), *effective competition* (William G. Shepherd, 1997).

researcher to selecting the appropriate representative firm. The firm whose pricing behavior is truly representative of the aggregate economy *must* display sticky prices. This research also extends considerably our understanding of the pricing behavior of markets that are usually not investigated for this behavior due to their high degree of competition.

Objectives and Format

This dissertation will be organized in five parts. The first explanatory and descriptive, the second theoretic, the following two extensively empirical and the last a conclusion. First, I intend to describe a New Keynesian view of the macroeconomy in Chapter 2.

Second, I will offer a theoretical explanation of firm behavior that generates price stickiness. The theory, hierarchial delays or decision costs, has been previously suggested in the economic literature (Blinder, 1990; Tommasi, 1992) but not fully analyzed. The effects of hierarchial delays on an unrelated set of issues are extensively addressed in management literature both agency theory and the optimality of hierarchial size have been addressed in the economic literature. In this section I build a simple model of hierarchies to explain price stickiness. I then generate extensions of the model to illustrate more realistic individual and firm behavior in the economy, in Chapter 3.

Third, I will describe the empirical aspects of workable competition in the market for microcomputers from 1993-1995, and the Colorado wholesale wine market in 1996. I compare these data to alternate theories of price stickiness and finally test the hierarchial delays theory in these markets in Chapters 4 and 5.

I conclude with an outline of the implications of my findings, and discuss the efficacy and path of additional research into price rigidities. I discuss the relevance of the hierarchial model and potential extensions of this model. In this section I place each of the empirical markets into macroeconomic context, and make an argument for their relevance to NKMT. In concluding this section I point to the type of research that would permit the incorporation of these findings into more extensive searches for price rigidities.

This story then begins quite generally, and theoretically, with a narrowing of focus from the macro to the microeconomy, and ending with a set of empirical tests in actual markets. Important implications and suggestions for further research conclude this dissertation.

CHAPTER 2

NEW KEYNESIAN MACROECONOMIC THEORY

A research program that seeks to explain aggregate fluctuations as the consequence of impediments to the coordination of the choices of rational agents who are individually maximizing but who are collectively prevented from achieving Pareto efficient allocation (Parkin, 1984).

I cannot improve upon Michael Parkin's description of New Keynesian Macroeconomic Theory (NKMT), so I will not attempt to further redefine it. However, I shall explain the most salient issues of a New Keynesian description of the macroeconomy. Since Parkin's description, most work by New Keynesian researchers has tended to focus on both real and nominal rigidities in microeconomic markets. The body of this literature links real and nominal rigidities to cyclical fluctuations in the macroeconomy. It is the contemporaneous effects of real and nominal rigidities that are, in part, necessary to explain the magnitude and duration of observed business cycles. They are necessary in explaining not only the socially inefficient levels of output, but also to reject the neutrality of money. Real rigidities denote deviation from socially efficient levels of output, but do not necessarily imply the non-neutrality of money. Nominal rigidities are required to reject the neutrality of money (Mankiw, 1991).

The central result of a New Keynesian model is rejection of the classical dichotomy and the neutrality of money.¹ The focus of this dissertation is the empirical verification of

¹However, consensus among New Keynesians as to the appropriate policy options to mitigate business cycles is absent. I shall only mention the potential policy implications of the non-neutrality principle, without fully developing them.

nominal rigidities. In this chapter I shall describe sticky prices as nominal rigidities. That is itself a large domain, so I will introduce only the most concise model. I will follow that with the aggregate consequences of staggered price adjustment and finally, a conclusion that suggests a path of additional investigation.

Nominal Rigidities

The suspicion that price rigidities are central to business cycle activity is not new. Gardiner Means' work on rigid prices during the 1930's was undertaken to explain the great depression. His work in this area was without strong conclusions and has been described as 'sterile' primarily because it lacked a cogent underlying theory of the macroeconomy (Martin, 1993). Industrial organization economists have long labored in the arena of pricing; however, a leading New Keynesian noted "remarkably little interaction between new-Keynesian theory and the evidence provided in the emerging literature of the new empirical industrial organization" (Gordon, 1990). The better part of a decade has passed since his writing, with little improvement on the situation, most work having been performed within a macroeconomic framework. While relatively little empirical work has been conducted on sticky prices there has been a great deal of theoretical literature notably, Sheshinski and Weiss [1987], Fischer [1977] and Okun [1981].

An early, and seminal, theoretical contribution was by Mankiw [1985], in which he extended the now familiar *menu cost* analysis. In this model, a monopolist faced with costs of price adjustment will not change prices following a demand shock if the cost of

adjusting prices exceeds the net gains from doing so. The key insight of this paper is that while the loss to firms associated with menu costs may be small, the aggregate effects may be large. Thus, an action that is privately optimal may not be socially optimal. The private optimality of this solution is critical to allaying the New Classical criticism that optimizing agents not overlook gains to price setting.

Given a monopolist with marginal cost K , a reduction in demand (to the illustrated demand curve) that is *not followed* by a change in nominal price (from P_0 to P_m) leads to a loss in profits of the area $B-A$. If this adjustment of price is subject to menu costs, z , then the firm will optimally reduce price only when $B-A > z$. However, social optimality requires the firm to adjust price whenever $B + C > z$; that is, when the net welfare gains of the price change are positive. Thus a contraction may lead to a reduction in social welfare despite fully rational firm decisionmaking. The result is small-firm level losses, with magnified aggregate effects. Figure 2-1 illustrates the potential firm losses following a decrease in demand.

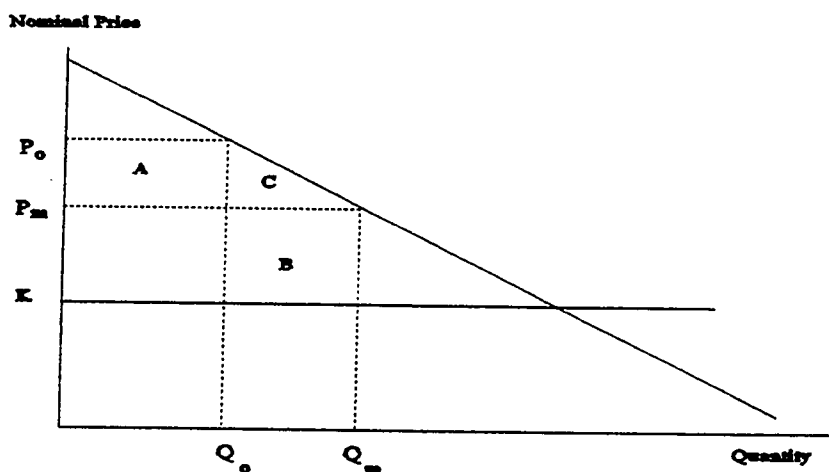


Figure 2-1, Potential Firm and Welfare Loss Attributable to Menu Costs (from Mankiw, 1985)

If firms enact a contingent pricing policy this suggests that the firm will adjust prices whenever $B-A > z$, assuming perfect information by agents acting optimally. If imperfect information is added to the model, the decision to adjust prices may be clouded. If, in the strictest sense, menu costs are the costs associated with physically changing and announcing price adjustments, then the costs imposed by informational imperfections within the firm are distinct from menu costs. I will offer later a model of hierarchies which incorporates these informational imperfections. Menu costs and hierarchial delays may simultaneously contribute to price stickiness, and distinguishing between these phenomena may pose a significant challenge. The distinction between menu costs and the family of informational issues will be further developed in the empirical chapters.

Menu Costs are one well known example of nominal rigidities introduced by New Keynesian theorists. Empirical analysis of menu costs has been conducted by Cecchetti [1986], van Hooymissen [1988], Kashyap [1990], Tommasi [1992] and Lach and Tsiddon [1996]. These works are quite extensive, but three important findings affecting this research emerge from this body of work. First, prices do not change instantly in response to changes in aggregate demand (price level changes); they are sticky. Second, there is extensive inter-firm staggering of price adjustment. These implicate nominal rigidities as a contributor to nonneutralities of money. Finally, there are intra-firm staggering of prices. This suggests that some costs of price adjustment are neither lump-sum nor concave. This final issue I will save for later explanation, but will note that linear or convex costs of price adjustment suggest some phenomenon in addition to menu costs. Tommasi identifies them as *decision costs* [1992].

Nominal rigidities are necessary but not sufficient to explain either the magnitude or duration of business cycle fluctuations. More clearly, if homogeneous firms enact contingent pricing policies where adjustment is made only when the net gain exceeds menu costs, then prices will change in synchronization. In this case, business cycles may only persist until aggregate demand changes sufficiently to spawn price adjustment by all firms. Yet, the observed duration of fixed prices is much shorter than the duration of business cycles. Thus, nominal rigidities alone do not explain the actual persistence of business cycle activity. An explanation for the aggregate effects of nominal rigidities was synthesized by Ball Mankiw and Romer [1988]. They begin with the demonstration of nominal rigidities developed by Mankiw, and others, by concluding "[a]s long as the predetermined price is close to the profit-maximizing price, the cost of price rigidity to the firm is small" [pg 150]. But, to this they add that:

"...the macroeconomic effects of nominal rigidity differ from the private costs because rigidity has an "aggregate demand externality." ... [t]he externality is that rigidity in firm *i*'s price contributes to rigidity in the aggregate price level." [pp 150-151].

They argue that nominal rigidities behave like externalities thus "highly inefficient nominal rigidities are not a mystery even though menu costs are small ... [and] nonadjustment of prices to a fall in demand leads to large reductions in output and welfare." [pg 152]. They go much further though, in stating the case for the importance of rigidities by concluding that:

"The simple models ... cannot fully explain nonneutralities of the size and persistence observed in actual economies. Therefore, we turn to more complicated models that incorporate realistic phenomena that magnify nominal rigidities. These phenomena include ... asynchronized timing of price changes by different firms" [pg 153].

Staggered or asynchronous price setting is suggested as a critical component of New

Keynesian analysis. I will address staggered price setting in the empirical portion of this dissertation, and attempt to link this with a theory of nominal rigidities. Here a fuller description of the role of staggered price setting is appropriate.

Staggered Price Setting

Clearly nominal rigidities may play a central role in the theoretical explanation of business cycles, but do not explain the persistence or magnitude of a cyclical fluctuation. As Ball, Mankiw and Romer have suggested there is more to the analysis. By explanation, imagine an economy with yeoman manufacturers and a homogeneous good. In this economy, if prices are limited to semi-annual adjustment, but demand shocks occur intermittently, then a business cycle, following an aggregate demand shock can last no longer than the duration of fixed prices. Markets will clear on the day prices adjust. This is fully synchronized price adjustment. Likewise, if firms adjust prices in constant proportion during the period, a business cycle will result, but will be less severe and no longer than the case of synchronized prices, and the aggregate price level will experience inertia.² In either case, the externalities described by Ball, Mankiw and Romer are not operative. Analysis of additional aspects of firm behavior may demonstrate the duration of business cycles, which are clearly much longer than the duration of fixed prices.

In explaining this, Ball, Mankiw and Romer suggest additional aspects of staggered price adjustment that are critical to the magnitude and duration of empirically

²See discussion by Benassi, Chirco and Colombo [1996], pg 235.

observed business cycle activity.

"In actual economies, recessions following severe demand contractions can last for several years, and while individual prices are fixed for substantial periods, these periods are generally shorter than several years. Thus models with sticky prices must explain why the effects of shocks persist after all prices are changed.

An explanation is provided by the literature on staggered price setting which shows that if firms change prices at different times, the adjustment of the aggregate price level to shocks can take much longer than the time between adjustments of each individual price [1988 pg 154]."

The reasoning behind much of this literature is clear; if firms perceive changes in demand that would generate an optimal price change they may not do so because it may change relative prices (hence causing a loss of market share). This description should be familiar to any industrial organization economist, and is theoretically supported by voluminous work in the game theoretic response of agents to demand changes. Indeed, this description of agent behavior may be traced to Paul Sweezy's [1939] kinked demand curve, the earliest of the modern game theoretic descriptions of markets (Hicks, 1997).

Ball, Mankiw and Romer emphasize other research that concludes the sum of these staggered price adjustments contributes to increasingly asynchronous adjustment the longer the chain of production. For example, since firms may experience staggered input prices, as well as staggered price setting by rivals, the reluctance to adjust prices may be exacerbated. The reasoning here is clear. If firms are hesitant to adjust prices due to rival behavior (desire not to change relative prices) then prices will be sticky. However, since firms also receive inputs, any staggered changes of input costs, due to similar behavior among suppliers, would further complicate the price change decision. If there are multiple inputs to production, then this behavior may generate multiple lags in price changes. The hesitancy to adjust prices due to the combination of supplier and rival behavior may propagate the effects of a demand (or cost) shock over a much greater time path. On this

issue, Ball, Mankiw and Romer conclude that:

“The literature on staggered price setting complements that on nominal rigidities arising from menu costs. The degree of rigidity in the aggregate price level depends on both the frequency and the timing of individual price changes. Menu costs cause prices to adjust infrequently. For a given frequency of individual adjustment, staggering slows the adjustment of the price level. Large aggregate rigidities can thus be explained by a combination of staggering and nominal frictions: the former magnifies the rigidities arising from the latter.” [1988, pg 155].

These, and other theories, establish a link between microeconomic behavior and the macroeconomy. This does much to illuminate our understanding of the nature of cyclical fluctuations as well as providing some strong explanations for important microeconomic phenomena. There is need for additional research in support of New Keynesian theory. Strong empirical findings of widespread nominal rigidities is needed to support the assumptions of the New Keynesian model.

In this dissertation I will attempt to provide empirical evidence of nominal price rigidities and staggered price setting in two markets. This is, in part, an attempt to offer strong microeconomic evidence in support of the assumptions that underlie the New Keynesian models of the macroeconomy. The next section outlines the reasoning for following this line of inquiry and in guiding my selection of markets to analyze.

Potential Research

The models of nominal and real price rigidities employed by New Keynesians depend upon imperfect competition in the goods market to generate their results. This is in stark contrast with the New Classical models that rely on perfect competition. New Classicalists are not concerned with the true degree of competition, only that the majority of markets behave “as if” they are perfectly competitive in the sense that they change price

continuously to clear markets (Barro, 1977). The argument suggests that long-term contracting, as optimal behavior, is a close approximation of market forces. This is predicated on rational perceptions by agents of the marginal product and marginal disutility of labor.³ Lucas and Sargent go further in rejecting any attempt at disequilibrium analysis with:

"Cleared markets is simply a principle, not verifiable by direct observation, which may or may not be useful in constructing successful hypotheses about the behavior of these [time] series. Alternative principles, such as the postulate of the existence of a third-party auctioneer . . . are similarly 'unrealistic', in the not especially important sense of not offering a good description of observed . . . market institutions." [1978, pg 61].

New Keynesians rely on imperfect competition in micro markets, in the sense that firms do not change prices or wages to maintain continuous market clearing. A direct criticism of the New Classical arguments is offered by Laidler as "... hard to take seriously as an empirical proposition, because it implies that agents have enough information to take market clearing decisions in the absence of price signals." [1986, pg 354, *supra* note 20].

To an industrial organization economist, the term *imperfect competition* is devoid of analytical content. Nearly all markets display some elements of imperfect competition. Therefore, the contention of price setting behavior that either theory relies on is not critical. Indeed, there should not be disagreement on the theoretical price setting behavior of any of the traditional models employed. Instead the question should be: where empirically are sticky prices found?⁴ The "as if" competitive contention of New

³See Laidler, 1986, *supra* note 20.

⁴At least one New Keynesian (Gordon, 1990) has described the representative firm as having a range of competition {i.e. bounded [0,1]}.

Classicalists, and the reliance on imperfect competition by New Keynesians hinges on the price setting behavior of the majority of firms, not the theoretical description of the market. How can a resolution to the question of price setting behavior be found?

Industrial organization economists have long been interested in the degree of competition and price setting behavior in markets. Several indices have been developed to measure degrees of competition.⁵ These will be discussed in more detail in later chapters. The degree of competition in U.S. industries may be illustrated employing a reliable, and well known technique, the concentration ratio of the top four firms. This index relies on the definition of the market, both regionally and through product definition, to suggest the 'fewness' of firms in the industry. Usually, the less restrictive the market definition, the lower the concentration (e.g. 'beverages' vs. 'caramelized, sweetened, carbonated beverages available in Blount County, TN'). The data illustrated are measured at a very highly aggregated level, the two-digit standard industrial classification (SIC), and may thus under-represent the 'fewness' of firms in a particular industry. The result is that the competitiveness of the industries may be over-stated. Despite this, it is apparent that a sizable proportion of industries are relatively uncompetitive as measured through this index. See Table 2-1.

⁵Note that no attempt to affix traditional models such as monopolistic competition or oligopoly is implied. I.O. economists cherish these models, but do not frequently rely on 'fitting' empirical measures of markets to the theoretical models.

**Table 2-1 Concentration of
U.S. Industries, 1988**

CR4 , 2-Digit SIC	Percentage of Industries
90-100	1
80-89	2
70-79	6
60-69	6
50-59	11
40-49	14
30-39	19
20-29	19
10-19	15
0-9	4

Note: Values do not sum to unity due to rounding. From
Concentration Ratios in U.S. Manufacturing, 1987 Census
of Manufacturers, US Government Printing Office

This table illustrates that actual markets exhibit a wide variety of competition, from very competitive at the low concentration levels and quite concentrated or uncompetitive at the higher levels.⁶ There are alternate methods of measuring competition, but by this example, the traditional monopoly (as employed by Mankiw, 1985) would represent less than 1% of the economy, and the traditional model of perfect competition less than 4%. Attempts to find price rigidities in monopolies, or continuous market clearing in the near perfectly competitive levels, is indeed laboring at the margins.

Again, the real problem is not to define the state of competition, and then generate model results based on the theoretical price setting outcomes of the traditional model.

⁶Also, the positive correlation between concentration, and the duration of fixed prices is one of the most repeated observations in the connecting literature between I.O. and macroeconomics (Means, 1935; Carlton, 1986; Gordon, 1990, Martin, 1993).

Instead, establishing the actual price setting behavior in a majority of markets would seem more relevant. Of course, it would require several years of combined effort, by all the economists currently working in industrial economics to establish the price setting behavior of firms in a majority of markets.⁷ An alternate strategy would be to search for price rigidities in markets that exhibit many of the characteristics of perfect competition, and labor towards monopoly in search of rigid prices.

It seems reasonable to assume that if widespread rigidities are found in markets of any degree of competition, *then the bulk of less competitive firms should also possess these rigidities*. Once widespread price rigidities have been found, then it would be appropriate for macroeconomists to employ, as their representative firm, one which best describes the true state of price setting behavior.

This strategy is fraught with danger for the New Keynesian researcher. If price rigidities are absent in all but the most concentrated firms, then it may be appropriate to concede that the New Classical model is a better description of the macroeconomy.⁸ The potential benefits are enormous. If firms in workable competition exhibit price rigidities, then Barro's "as if" proposition is called into question. Indeed, the criticism by Lucas and Sargent is moot if markets very near the ideal of perfect competition display pricing behavior heretofore believed to be present only in much less competitive firms.

Also, as with any research, much replication is necessary. No dissertation length

⁷A leading I.O. economist, Timothy Bresnahan, related to Gordon (1994) in a survey of New Keynesian economics that defining a single market by this method would require the estimation of "literally thousands of elasticities" (Gordon, 1990, pg 1128, note 18).

⁸Also, on a more practical level, much looking may be necessary before rigid prices are found. An extensive search for price rigidities while on a graduate fellowship is not appealing.

empirical survey could answer definitively the questions raised above, which are, in effect, the appropriate choice of the representative firm behavior in a macroeconomic model.

I shall begin the search for price rigidities in firms as empirically near the traditional model of perfect competition as are found in industrial markets. These firms will exhibit the characteristics of *workable competition* suggested by Clarke [1946] and Sosnick [1958].

Workable Competition is not a new theoretical interpretation of a market but one which has its foundations in the earliest effort by microeconomists to describe markets as they empirically appear. The foundation for this research was the realization that the traditional model of perfect competition “. . . does not and cannot exist and has presumably never existed, for reasons quite apart from . . . collusion” (Clarke, 1940, pg 241). The perfectly competitive model remains a standard for efficiency, but as Clarke pointed out so long ago, it is an “unreal . . . starting point of analysis” (1940, pg 241).⁹ The theoretical result of this search for a more realistic benchmark for analysis is workable competition.¹⁰ From Clarke’s work, a number of theorists have developed a criteria based approach to market structure, conduct and performance, the traditional analytical framework of industrial organization.

Market structure conditions for workable competition suggest there should be no

⁹The efficiencies Industrial Organization economists point to in the traditional model are productive efficiency at the equality of price and average cost, and the allocative efficiency at the equality of marginal cost and price.

¹⁰Monopolistic Competition (Chamberlin, 1929) which has been used by several NKMT theorists as the representative market, suggests product differentiation (address-type) generates less than perfect elasticity in the goods market. This is a much less competitive market structure than workable competition. This heterogeneity issue will be explained at length in Chapters 4 and 5, the empirical section of this dissertation.

barriers to entry or exit, the number of producers should be as high as economies of scale allow and product quality should be price sensitive. Market conduct requires uncertainty as to rival behavior in the event of price adjustment, and non-collusive behavior, including the absence of predation or limit pricing. Conduct also requires that efficiencies should be rewarded and inefficiencies punished in the market. Advertising should be primarily information based and price discrimination (other than cost-based price differentials) not be present. Market behavior suggests inefficient resource use not be apparent, a responsiveness of product attributes to consumer demands be observed and profits should reward investment. Market behavior must also be characterized by equilibrating adjustment of prices,¹¹ technical innovation, and appropriate levels of advertising should occur.¹² Finally sellers who yield to consumer demand should be successful. The basic criticism of this analytical process is the potential subjectivity of any individual interpretation. It is the sum of the evidence that should be less open to criticism.¹³

What this theory creates is a reasonable benchmark for analysis, *workable competition*. Given that researchers into markets have long concluded that the traditionally competitive market does not exist, the New Classical modelers choice of firm behavioral characteristics should be challenged. I will do so; however, I do not suggest

¹¹My interpretation is that in the wake of cyclical instability that prices should adjust *towards* market clearing. This implies a general equilibrium framework is correct, but does not suggest prices adjust smoothly and continuously. Indeed I shall offer strong evidence to the contrary.

¹²Subsequent to the theoretical introduction of workable competition the Dorfman-Steiner conditions of advertising, which suggest an optimal level of advertisement exists and is empirically verifiable (though not in this dissertation).

¹³This list taken from Scherer and Ross, 1992 whose review of the literature is concise and clear. Interpretation of individual aspects taken from Sosnick [1958] and Clarke [1946].

replacing their representative firm with one of workable competition, because I do not assert that workable competition characterizes the majority of industrial markets. Indeed, most markets are *less competitive* than the standards required of workable competition. I believe that under questioning classical modelers would assert that workable competition is sufficiently like the ideal model of perfect competition to leave their modeling conclusions intact. I suggest they are quite wrong. *Once markets deviate from the implausible ideal, they no longer adjust prices continuously.* If this can be empirically established, the New Keynesian theory suggests a realistic, elegant, and empirically supportable description of the macroeconomy.

CHAPTER 3

HIERARCHIAL DELAYS

"... the interrelationships which govern the mix of market and hierarchy, to use Williamson's terms, are extremely complex, and in our present state of ignorance it will not be easy to discover what these factors are. What we need is more empirical work." (Ronald Coase, Nobel Laureate Lecture, 1991)

A research agenda, recently supplied by a Nobel prize winner is sufficient reason to undertake inquiry, and is all the more fascinating if the research may simultaneously answer additional unrelated questions. A full theory of hierarchies is beyond the primary purpose of this dissertation, which is an empirical investigation of price rigidities in two industries and support for a macroeconomic model. However, I must explain, in as simple a manner as possible, why hierarchies matter in the context of the firm. In this chapter I intend to review the existing work on hierarchies and illustrate how hierarchies generate informational delays in firms. This will yield some testable hypotheses concerning pricing and hierarchies.

A Review of the Literature

That hierarchies exist, and are major contributors to errors and delays in decisionmaking is clear. There has been some important theoretical work performed by economists on hierarchies, but little empirical research; certainly nothing as extensive as the popular concern with management problems would suggest. Nevertheless, management information systems, on which billions of dollars have been spent by U.S.

businesses this year alone are in large measure attempts to ameliorate hierarchial delays. Even the "Reinventing Government" crusade of the current administration and Congress' examination of the Internal Revenue Service are at their core, attempts to address costs imposed by an extensive hierarchial structure.

Why then are economists slow in addressing the effects of hierarchies (for example there are no existing theories on whether prices change slowly due to hierarchial delays)? The answer is straightforward: economists have good reason to be suspicious of theories that suggest optimizing agents and firms allow hierarchies to interfere with maximizing profits. Prices, and to a lesser extent quantity and quality are the variables that firms must adjust to meet consumer demand. Failure to adjust these variables when appropriate is the very definition of non-optimal behavior. For this reason alone economists are—as they well should be—loath to accept a departure from optimal behavior without cogent theoretical explanations.

The origin of the modern economic investigation of hierarchies began with Ronald Coase's ground breaking *The Nature of the Firm* in 1937. In this seminal paper, Coase attributed firm structure to optimizing behavior, the minimization of transactions costs. Simply, the organization of production, and the myriad internal exchanges that firms undertake are performed at a lower cost by firms, than through markets. Later researchers extended his explanation, with the direct genesis of Coase's work culminating in identifiable types of transactions costs, *coordination* and *motivation* costs (Milgrom and Roberts, 1988, 1992). These authors suggest that the organization of production and exchange requires a hierarchial structure, and use as examples stock exchanges and

production planning in firms. They also identify two separate types of motivation costs, those of *asymmetric information* and *imperfect commitment*. [1988, 1992, pg. 28-31]. Still, Coase thought the issues he raised in 1937 sufficiently under-studied to emphasize the need for expanded research on them in his Nobel Laureate lecture in 1991. He was especially critical of the lack of data intensive analysis on hierarchies and markets that was then (and is now) a lamentable condition in industrial organization.

Following in Coase's footsteps was Oliver Williamson, who in a 1975 book *Markets and Hierarchies* addressed nearly all the major issues of internal organization. This work emphasized analysis of the actual transaction of a good, and borrowed heavily from the Institutionalist approach of J.R. Commons.¹ Its greatest contribution is to provide strong neoclassical or micro theoretic explanations for existing Institutionalist theories, in a process the author called an attempt to "reformulate old issues" [1975, pg xii].² Williamson's book detailed several informational aspects of organizations; contracts, vertical integration, the economics of multidivisional firms and conglomerates as well as market power issues. This research holds a central position in the hierarchial literature, but is certainly not alone in its explanations of hierarchial behavior. Notably George Stigler [1961b] offered some comment on information costs, Joseph Stiglitz [1975] produced interesting work on firm structure with respect to incentives, risk and information. His chapter in the *Handbook of Industrial Organization* [1989] provides a

¹Williamson's work is an important element of the New Institutionalist economics.

²Specifically, Williamson felt, as did J. R. Commons, that the *transaction* was the basic unit of economic activity and should be the starting point of analysis.

valuable review of information's role in economic organization and transactions.

As expected the more recent research into these issues has been dramatic. Tirole [1985] offered economic explanations of bureaucratic behavior in firms, while McAfee and MacMillan [1995] extend the notion of hierarchial delays into the now familiar *organizational diseconomies of scale*. These authors conclude that the organization size may create real costs to firms unrelated to physical production. Also, Keren and Levhari [1989] analyzed specific firm models that captured elements of decentralization and loss of control due to hierarchies. In this paper the authors create a specific model of firms that permits decentralization of decisionmaking. They illustrate a distinct cost between decentralization and loss of control. This suggests that decisionmaking has direct costs to firms. My research is related to this area of inquiry.

The literature on hierarchies is not isolated to economic journals. Both the sociology and industrial psychology literature on hierarchies are extensive. The literature in these areas focuses more heavily on issues not directly related to transactions costs, so is outside the scope of this review. They do provide an interesting link to other social sciences which was identified by Williamson as critical to the extension of economic theory in this area. [1975, pp. ix].³ The management literature, though quite broad, has mainly focused on ameliorative efforts of hierarchial costs which center on the incentive issue and decisionmaking delays. It is on the incentive issue that some of the most interesting economic analysis has been performed. The principal-agent problem as it pertains to risk and insurance is quite developed. It has extended into analysis of

³Mankiw [1990] also identified this as an interesting adjunct to NKMT research.

government (Stigler, 1961a) and the family (Cigno, 1991) in numerous microeconomic issues. Its relationship to transactions cost was specifically developed by Keck [1987] who identified private information as the primary culprit in transaction failures in a wide variety of environments. Qian [1994] identified the incentive problem as a contributing to loss of control in hierarchies. This paper specifically develops this issue within the context of an optimal hierarchy, first introduced by Williamson [1967]. A far-reaching review by Radner [1992] details firm behavior with several extensions into information issues. He identified managing as a central economic activity (illustrated with considerable data) and builds several models with varying decision levels, comparing each.⁴ Yang [1995] built a model of supervision which included hierarchial control into a supervision specific context. This model is based on the previously mentioned work by Williamson, Keren and Levhari. Further work by Syzmanski [1987] introduces moral hazard into internal labor markets for a firm. Haubrich [1994] calculated the optimal marginal valuation of performance pay in a theoretical paper. Noe and Rebello [1996] also extend the notion of managerial opportunism. Their paper identifies an optimal locus of control in firms. This is an extension of the optimal hierarchy work done by Williamson [1967]. Dong and Dow [1993] offer an interesting, and rare, empirical analysis of supervision (*monitoring costs*) in Chinese agricultural cooperatives. In a recent paper Mehta [1998] suggests that the limited time managers possess must be expended on both monitoring and coordination. The observation is that the more time spent monitoring the less spent coordinating, a clear

⁴His work also suggests that ameliorative efforts may require long implementation lags, and therefore there are long delays in effecting hierarchies through firm policy. This is important in selecting the length of time for empirical action in the following chapters.

addition to Williamson [1967] that develops several interesting labor market issues.⁵

The expansive issues of hierarchies and the principal-agent problem have also seen research that suggests macroeconomic relevance. The previously mentioned work by Akerloff and Yellen [1985] on efficiency wage and near rational firm behavior suggest macroeconomic implications to the microeconomic issues mentioned in this chapter. Curiously missing from the literature is an explanation for hierarchial delays in price setting by firms. Perhaps this is due to a central tenet that price is the informational element to much of firm decisionmaking, or because it seems unlikely that a firm would allow this problem to interfere with optimal price setting behavior.

I have found only two references related to hierarchial delays in the macroeconomic literature. First, Alan Blinder [1990, 1992] conducted a survey into price rigidities which included hierarchial delays as a possible explanation. Second, Mariano Tommasi [1992] concluded that there was evidence of decision costs in price setting by firms. Both of these researchers were exploring the microeconomic foundations of macroeconomic phenomenon, as does this dissertation, in part.

Two important concerns emerge from this literature. First, if price is considered the primary information element to firms, how does the near universal existence of administered prices enter into analysis? Second, if firms find it difficult to control the simple incentive problems described in the literature, how can they accurately calculate much less ease hierarchial delays? I shall address both these issues in the following model.

⁵This article received much attention in the popular press immediately following its publication. Between the time this dissertation was approved by the committee and final editing was performed a review appeared in *The Economist* (May 30th, 1998, pg. 74).

What follows here is a simple model of hierarchies within firms and an illustration of how price setting may be affected by these hierarchial delays. Following this simple model are extensions into bounded rationality and the principal agent problem. This model is not new, nor extensive in its content, but quite simple in formulation. That is my intent—I am seeking generality—for a complex model is unnecessary to explain the behavior I suggest is a root cause of price rigidities. The sole novelty of this approach is that it is used to explain inflexible price adjustment. That is a necessary condition for the New Keynesian explanation of business cycle activity. That the result of hierarchial delays, rigid prices, has macroeconomic importance was explained in the previous chapter. That it actually occurs will be illustrated through empirical investigation of two separate markets in Chapters 4 and 5.

How Hierarchial Delays are Generated

In the following three level hierarchy there is a principal, who supervises two managers, with each manager supervising two agents. Decisions concerning product aspects other than price are not initially considered. In the simplest form of this model the firm hierarchial relationship is as illustrated in Figure 3-1.

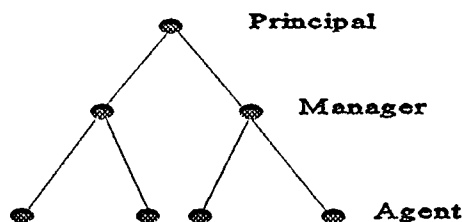


Figure 3-1, Simple Hierarchy

In this simple form, the model may easily fit the traditional model of perfect competition. If the agent sets prices in the Walrasian tâtonnement process, then prices will adjust continuously to market clearing, and the neutrality of money will exist. If price decisions are made at higher levels (manager or principal), but respond at an instantaneous rate then in a real sense there is no deviation from Walrasian market clearing. These assumptions rely on tremendous artifices.

Firms that respond to organized market prices (such as commodities) may adjust prices quite rapidly. However, Blinder [1990,1992] found that less than 2% of firms actually change prices daily.⁶ Enlightening as this may be it still does not imply that failure to adjust prices daily is sub-optimal Walrasian adjustment. The absence of a large number of rapidly adjusting markets may lead to doubt as to the appropriateness of describing the aggregate economy in terms of continuous market clearing. A method of determining the Walrasian rate of adjustment is the examination of price setting characteristics of firms operating in the same market. In this situation, firms should adjust prices simultaneously, and with the same magnitude. This shall be the basis for this model.

Henceforth assume that firms are operating in workable competition. This is the nearest empirical example of perfect competition found in industrial markets. Firms in workable competition are distributed very high on the competition spectrum. Essentially there is no market power, firms administer prices, in that they must decide upon the appropriate price and mark the product with that price. They still rely on information derived from the market as to the appropriate price. The products are nearly

⁶ So, "in the beginning there were markets" (Williamson, 1975, pg. 20).

homogeneous, in that they do not have an address-type heterogeneity. If one firm exits the market, then the excess demand this generates will fall with equal proportion on all other producers of the good.

First, I will answer the problem of how the near universal existence of administered prices may be explained in a hierarchial context. This is simply how prices may be set in firms. To begin this analysis, I will construct a stylized information transmission mechanism for our firm. Information transmission (dI/dt) between the hierarchial layers takes one period to transmit. Also, the decision (dD/dt) to transmit the information requires one period. Each actor in our model then takes two periods to decide and transmit information. The transmission of information upward is subject to this decision process, downwards there is *passive decision support* (Koh, 1994). This suggests that the lower echelons simply transmit decisions downward without undertaking the decision process.⁷ Refer to figure 3-1, where movement along each connecting length takes a period, while decision at the nodes require one period. With passive decision support and an initial decision by the agent exhausts seven time periods for full information to be decided and transmitted in this firm, from agent through manager to principal and back. This is a hierarchial delay.⁸ It follows the following schema:

⁷Here I could incorporate Broadcast information (Milgrom and Roberts, 1992) which reduces the time period of decisionmaking for all firms. This does not substantially change the model, but is an interesting potential extension. Also, the possibility that firms change their hierarchial structure in order to speed decisionmaking was suggested by Radner [1992].

⁸The initial informational event could be a change in demand

t: Agent receives apparent demand shock from consumers (lowered sales), and decides it is credible.
 t+1: Agent transmits information to manger.
 t+2: Manager decides that agent information is credible.
 t+3: Manager transmits information to principal.
 t+4: Principle decides information is credible and decides to change price.
 t+5: Principal transmits information to manager.
 t+6: Manager, undertaking *passive decision support*, transmits information to agent.
 t+7: Agent changes price.

This does not yet clearly establish non-Walrasian market clearing. To infer this, I will introduce progressively, several modifications to the basic model. The first modification to the model is to maintain firm homogeneity; except by altering the pricing decision echelon to the principal in one half of the firms. There, one half the firms retain price decisions at the principal, the remainder with the agent. Imposition of a demand shock requires each firm to change prices to maintain their prices at the optimal level. Our prescient firms change price instantly to the market clearing level. The remaining firms require seven periods to adjust prices to the market clearing level. At this point I will impose a capacity constraint on firms so that adjusting inputs (hence outputs) requires several periods. This is only necessary to establish that the prescient firms cannot increase output to meet demand immediately. This will generate a decline in output, assuming a negative demand shock, a loss of revenues to the firms experiencing hierarchial delays, and a reduction in profits to the firms and wages to the workers.⁹

This model is compelling because it establishes staggered price setting in firms, with the sole altering of the pricing decision echelon from the agent to principal. This is a trivial example however, extensions of this model will provide more useful analysis.

⁹This assumes that wages are a constant proportion of revenues $w = \rho R$, where ρ is a proportion and R is total revenues.

The second extension allows the firm to vary in size. So for this example, assume one firm produces two goods, the remaining $K-1$ firms produce one good.¹⁰ This requires the addition of an additional hierarchical layer. There is now one firm with two layers of management. Assume each firm retains pricing decisions at the principal level. The general demand shock now implies that the larger firm requires longer time (9 periods) to change prices, while our prescient firms require 7 periods (here I retain pricing decisions at the principal level in all firms.) This does not alter the competition environment. If firms have long delays in changing capacity, the smaller firms will be able to collect short run profits, but unless we assume frequent shocks, the firms with delays will eventually adjust to market clearing. I must note that the degree of competition is not necessarily altered here. Workable competition may remain the appropriate description of the market. Indeed, only if the price lags are much longer than the capacity lags would the competitive structure of the market change. Short-run dynamics do not necessarily alter the long-run degree of competition.

To extend the model further, assume the firms are distributed such that one half the firms produce $1/N$ products, with the remainder producing $.5N$ products. If all firms retain pricing decision at the principal, then the smaller firms require seven time periods to adjust prices in the wake of a demand shock. The larger firms require a much longer period ($7 + 1.5N$ periods). The original price adjustment requires 7 periods and follows the previous schema, while the larger firms require a longer time period such that:

¹⁰ Assuming that there are many more firms than products (perhaps tenfold) implies that randomly assigning products to firms ensures a high degree of competition.

This imposes rather large price rigidities on the bigger, multiproduct firms. This causes staggered price setting, and is sufficient for this explanation of rigidities. However, a much more developed argument is obvious.

Thus far the assumption that all workers take one period of decision making, and share the same utility function has been used. This is highly stylized; however, firms of varying size exist, as multiproduct firms, even in workable competition. The critical observation is that price rigidities may exist even in workably competitive firms, and are directly correlated with firm size. This suggests the following:

Proposition 1: The frequency of price adjustment, for firms in the same market, is a strictly non-increasing function of firm size.¹¹

Thus, the first empirically testable proposition is suggested. If firms are subject to the same supply and demand shocks, then, absent hierarchial delays they should change prices with the same frequency, and in synchronization. That is the conclusion of the traditional competitive model. Here I have established the former is in doubt, and have suggested that it may be tested empirically. If firms are subject to hierarchial delays, they will not change prices with the same frequency. However, I have not established any degree of certainty as to the synchronization of price changes.

In fact, this simple model concludes that prices will change in synchronization (half of all firms change prices simultaneously). Fortunately, the answer to this question rests in

¹¹Proof: Clearly, if price adjustment requires information flows (dl/dt), which is functionally related to the number of workers $dl(N)/dt$, then it cannot take less time to transmit information to two workers than it takes to transmit information to one worker. Therefore $dl(t)/dN \geq 0$. IFF $dl(t)/dN \neq 0$ then $l(N)$ is a strictly increasing function. This implies hierarchial delays is positively related to the size of the workforce.

extensions of the model which are necessary for any treatment of hierarchial behavior in firms.

Extensions of the Model

The first important extension of the model is to incorporate the idea of *bounded rationality* (Simon, 1961, 1997). I will employ what Williamson [1975, pg 21] identified as the critical element of his definition that "human behavior is 'intendedly rational, but only limitedly so'" (Simon, 1961, pg. xxiv). Williamson identified two important characteristics of bounded rationality, the first is that there are neurophysiological limits to human calculation, the second that there are language limits. I shall model the former, simply because it is most convenient. However, in a general model of this nature, the distinction is not critical.

So, with the same distribution of firms as the previous model, I suggest that no individual manager is capable of making more than $\Pi_i N$ decisions per period. Where $\Pi_i \in [0, 1]$. The distribution of Π_i need not be specified within these bounds. The result is that each firm has a different rate of information decision.¹² The new rate of adjustment for the firms with hierarchial delays is $7 + .5N + \delta_j$ where δ_j is the sum of the delays imposed by bounded rationality on the firm: $\delta_j = \sum (dI/dt + dD/dt)$.¹³ This is the first example which

¹²The information transmission and decision mechanism is adjusted here, so that managers who exceed $\Pi_i N$ in a period merely "back log" decisions. When they have processed their maximum, the decisions are held until they can be made. It is tempting to add an "in box" effect, so that decision overloads are sequentially placed into an "in box" and decided upon in reverse sequence. This exacerbates hierarchial delays.

¹³This is a non-specified increase in the time required to decide and transmit. There are numerous explanations for this. In *Modeling Bounded Rationality*, the author provides chapter level treatments of *knowledge, limited memory, choosing what to know, complexity in group decisions, finite horizon paradoxes,*

introduces a deviation from simultaneous price adjustment by the firms experiencing hierarchial delays. An exception is that if δ_j does not vary across firms, then there is no deviation from synchronization in price changes for the firms experiencing hierarchial delays. That occurs when N is sufficiently large so that the number of managers within all firms (those producing more than one good) exhibits the same sample distribution as the population of managers. This unlikely occurrence may be entirely avoided if the distribution of products in a firm is altered. The new model specification may take an unspecified distribution (say, normal). This does not necessarily imply a deviation from workable competition, which accepts a range of firm size, especially in conglomerates. This results in asynchronous price adjustment, and should be sufficient to establish that firms in workable competition do not vary prices in synchronization. However, another extension of the model reinforces this conclusion.

Assume now, that firms may vary vectors of product attributes other than price; however, changing price is the least costly method of adjusting to market clearing for any good. These changes may be made at any level, but because of higher costs are sub-optimal to changing price. Also, assume that a proportion of actors possess an altered utility function. Assume that for all actors with a modified utility function wish to appear as successful managers, to move vertically in the firm hierarchy. Therefore they may not vary price following a demand shock. Instead they will change some other attribute in the product vector. This would not be directly visible to higher level managers, who would

computability constraints, procedural decision making and bounded rationality (Rubinstein, 1998). Selection of one of these explicitly reduces the generality of my model.

only observe an unchanging price and quantity. I do not wish to complicate the model so have kept this as an unspecified exogenous element of the utility function for a proportion of actors.¹⁴ This lack of formal specification does not alter the outcome which is to introduce the *principal-agent* problem into the model.¹⁵

Now, when a demand shock occurs, firms face two problems, they must transmit and decide upon the information concerning the price change. This causes larger firms to adjust more slowly, and also eliminates the synchronization of price adjustment among firms. The second problem firms face, is that a proportion of their employees do not share their optimization functions, and will not readily transmit optimal pricing information. The combination of these two problems introduces *information impactedness* into the model as an explanation for hierarchial delays in price adjustment to market clearing (Williamson, 1975). This outcome makes it clear that information impactedness generates asynchronous price adjustment in firms. This offers an additional proposition.

*Proposition 2: Information impactedness, randomly distributed across firms generates asynchronous adjustment of prices in the same market.*¹⁶

I have not yet described the effect of a supply side shock, the result of which is less severe, if only because firms should have better information regarding changes in the cost of inputs, than demand. A supply shock could be the result of costs changes to an input,

¹⁴This is quite plausible, the higher an individual moves in the hierarchy, the higher the wages. It is not necessary to build an extensive model of retirement and new entry to explain this process.

¹⁵This means that some workers are maximizing their utility in the long-run, or over a lifetime, not the short-run. Otherwise, they would not forego the short-run loss in wages that are a proportion of firm revenues.

¹⁶**Proof:** Clearly, if information flow $I(N)$, and p is a parameter adjustment of bounded rationality assessed to an individual agent within a firm, and $p \neq 1$, then $dI(t)/dN \neq p dI(t)/dN$.

such as microcomputer chips in the computer market, or severe weather affecting grape production in a wine market. In either of these events it seems apparent that the firm would have better information regarding shocks since they would appear in the cost data of the firm. For that reason alone, it is safe to conclude that supply shocks generate pricing responses more quickly than do demand shocks. If firms are of different size, and experience different rates of information transmission and decisionmaking it seems clear then that the frequency that prices adjust will vary.

The magnitude of the variation in the frequency of price adjustments is an empirical not theoretical issue. That will be addressed in Chapter 4 and Chapter 5. Also, I have not mentioned the possibility that a change in price for a subset of goods may generate price stickiness. That is a reasonable extension, but complicates our argument unnecessarily.

This explanation of price adjustment has only touched the surface of information theory and hierarchy problems endemic in firms. I suggest that the problems of information impactedness is orders of magnitudes greater than this model implies. Models of information transmission and hierarchies that currently exist in the literature address issues of much greater complexity than those mentioned here. Of note, is the problem of hierarchial delays in firms that possess market power. That issue was specifically not addressed in this dissertation because the focus here is on workably competitive markets.¹⁷ Also, the notion of passive decision support (Koh, 1994) would not seem appropriate if

¹⁷Of course the traditional model of a monopolist changes prices continuously; it is only the addition of menu costs or some other variation of the traditional model that leads to price stickiness.

contradictory price signals occur. This is readily applicable to firms where bounded rationality or information impactedness causes upper level managers to receive information from the same shock to aggregate demand at differing times. This only serves to increase hierarchial delays.

A potential criticism of this model is its explanation of why firms grow to a size that generates hierarchial delays. I have used the artificial imposition of the number of products produced by a firm. This, of course, is not how a product mix is determined in actual markets. There are two powerful answers to this potential criticism. First, information impactedness suggests that managers may not know they have hierarchial delays. If this were true then there would be no reason not to increase firm size.¹⁸ Second, economies of scale in production may be of sufficient size to generate growth without regard to hierarchial delays. Also, firms may grow to achieve economies of scope in production. Or simply, a principal-agent situation may arise where a manager desires to have control over a large firm. This is interesting also for it suggests that the strategy of asking managers about hierarchial delays is in error. Blinder [1990, 1992] did so in a survey of business managers, asking them about price rigidities in their own firms.

Blinder rejected hierarchial delays, and went so far as to suggest that further investigation of this form of price rigidities was fruitless. I disagree, and note three reasons for my disagreement. First, it is interesting that the theory itself was suggested by

¹⁸There are numerous reasons to increase firm size, economies of scale, economies of scope, etc. I have not modeled them taking them as axiomatic. There are reasons within the bounded rationality argument to suggest that firms increase size. Specifically, this is to give managers increased power, or span of control, and ultimately higher wages. I only wish to note these, extending them into this model only unnecessarily complicates this discussion.

a manager in the preliminary survey, it not being a theory extant in the economic literature. Second, despite its poor showing in the survey, a larger percentage of managers in large firms accepted this as a relevant theory. Finally, I suggest that the most interesting point is that *any* manager actually rated this as a possible cause of price rigidities. If a manager was aware that hierarchial delays caused lost revenues, why did he not ameliorate them? Also, if they did exist with whom does the fault lie? I believe that failure to fix hierarchial delays is a management error of the most egregious type, and unlikely to be admitted to by most managers.¹⁹

This brings me to answer the second question from the early part of this chapter. How can managers mitigate the effects of hierarchial delays? I suspect firms accept some hierarchial delays, even if they are aware of their existence—and I believe many are. They should be treated as simply another cost. This is conceptually quite similar to the problem introduced by Mankiw [1985] where firms respond optimally to menu costs; imposing high costs on the aggregate economy. Even if information impactedness were to be overcome and a responsible manager observe hierarchial delays, do they differ in some remarkable way from other costs? They may be reduced through expensive information systems or management training as I mentioned in the opening of this chapter. They may be relieved by reducing firm size, spending more on worker training or eliminating redundant management. In any of these cases there is no reason to believe that

¹⁹I will only offer my experience here as a staff officer (operations) in large organizations (800 to 25,000 persons), and as an executive officer (chief operating officer) and commander of smaller organizations (~300 persons). In these organizations, hierarchial delays undoubtedly existed, but we all labored exhaustively to ameliorate them; failure to do so was almost unforgivable (and potentially fatal). This is not a characteristic only of the U.S. Army, but more likely to be found in profit maximizing firms.

ameliorative steps, at the margin, would be more costly than the marginal cost of the delay itself. Indeed, quite the opposite conclusion may be made. Information impactedness makes hierarchial delays less visible, so the true marginal effort of reducing hierarchial delays may always deviate from optimality.

As I mentioned previously, Blinder felt that hierarchial delays were a form of menu cost, and I allowed that in the macroeconomic context the two were similar. Here I suggest that, menu costs exist for firms, and are well known to managers, and are subject to the same type of appropriate decisionmaking as other costs. They may lead to price rigidities, and are part of a firms' optimization decision as suggested by Mankiw [1985]. Hierarchial delays, or decision costs, which are synonymous here are different from menu costs, in that the simple optimization function of the firm differs. In Mankiw's model, firms were not subject to the problems of information impactedness. The decision not to adjust prices given the existence of menu costs was a perfectly rational act.²⁰ The existence of information impactedness suggests that the firm cannot optimally adjust prices. Failure to adjust to a optimal position when it is possible is irrational, it is perfectly rational to not adjust when one does not know the optimal position. The central conclusion about the problems of information in the firm is that they exist, and ameliorative steps may be taken. However, the actual existence of the problems may be unknown to actors who would be responsible for their correction.

Also, firms may have these problems and yet be in workably competitive

²⁰That is, the optimization function employed by Mankiw allowed for perfect information flow and decisionmaking.

environments. There may be an ebb and flow in the magnitude of hierarchial delays and firms may experience hierarchial delays at different times. I am only mentioning this to highlight that the antecedents to this model have identified information impactedness as a strong contributor to hierarchial delays (though not specifically in the context of pricing). This model concludes that this problem exists in workably competitive firms, and may be empirically verifiable in the frequency that prices change in firms with differing hierarchial structures (size). This should be of great interest, and was even identified by Radner [1992] as a previously unexplored area of investigation.

What remains is to test this model empirically, on workably competitive markets and verify or refute the predictions of *Proposition 1* and *Proposition 2* that hierarchial delays impose nominal price rigidities and asynchronous adjustment of prices on goods in the same market.

CHAPTER 4

THE MICROCOMPUTER MARKET

"In the prosperous 1980's [Firm X] increased its management layers and slowed the decisionmaking process. In late 1990 the company restructured, trimming its work force by 8% (about 400 employees)." (Computer Industry Almanac, 1995)

The market for microcomputers developed quickly in the late 1970's with the widespread introduction of new technologies that miniaturized the processing capabilities of larger mini-computer and mainframe systems (Langlois, 1990). This was followed closely by the introduction of two computer operating systems (DOS and APPLE) which permitted the extension of many of the computing features to persons not skilled at the existing computer languages (e.g. COBOL, Basic, etc.). This allowed for the adaption of software for a variety of applications from word processing to games.

By 1993 (the beginning of this investigation) the microcomputer had undergone five "generations" of product development, and had acquired a well founded reputation as a rapidly changing technology. The market itself began (as most do) as a near monopoly, but rapidly matured into one of robust competition. As demand increased, the number of goods and firms increased remarkably. This accompanied rapid cost decreases in the basic components of computers, especially the processing chip. Indeed "Moore's Law" that posited geometric increases in chip design was widely used to describe the future of this market.¹ Many firms produced multiple goods, while others limited their product lines to microcomputers. Additionally, this market had various sized organizations, a

¹Moore's Law suggests a decrease in chip size every 2½ years, hence a doubling of its capacity in that time (Schaller, 1997).

characteristic which clearly offers potential for testing of hierarchial conditions among firms as described in the previous chapter. This chapter will develop a detailed argument as to the competitiveness of this market, explain the price setting characteristics, and empirically examine both issues.

Market Structure

Product Differentiation

Competition analysis of the microcomputer market began with product definition. I selected the Data Operating System (DOS) compatible² microcomputer with 80486SX and 25/33/50 Megahertz processor and components.³ This product was sold directly from the manufacturer to independent computer retailers. The time period selected was January 1993 through December 1995, which was convenient for eliminating some potential substitutes under the inference of low cross price elasticity.⁴ First, the Apple-Macintosh machines were excluded. Not until late 1993 was software generally available to translate the Apple-Macintosh operating system into the DOS system and vice-versa. Even now (1998) the process is not fully debugged for some common software applications. Also, a number of consumers were adjudged to be purchasing upgrade systems, and so were wedded to either the DOS or Apple systems from previous

²This is also known as IBM compatible.

³This includes memory upgrades and electronic assembly components for the system.

⁴A measure of the cross price elasticity against even close substitutes is not feasible so I will employ the techniques outlined in the *1992 Department of Justice Merger Guidelines*, and here infer cross price elasticities.

computer purchases.⁵ For these reasons I eliminated Apple Macintosh machines from the investigation.

The decision to exclude the small number of 80386 machines on the market was especially simple. The 80486 Central processing unit (CPU) was the state of the art consumer machine during the sample period and would not be readily substituted for the older machines.⁶

INTEL corporation possessed 70% of the U.S. microchip market during this time period. While smaller firms also produced chips, the price of the chip sold to the manufacturers as well as the duration of prices is not available⁷. The SX processor assembly does not have a mathematics co-processing capability which is available with DX chips. This affected only a small number of software applications of the period. The DX processor was available at a much higher price (as much as 1/3 of the total price of the chip).⁸ Consumers requiring a DX processor would likely purchase that option, those not requiring the DX option would not incur the unnecessary expense.

⁵The industry marketing literature recognized both the *Switching Costs* between DOS and Apple systems and the strategy of marketing to upgrade buyers. I concede this is not scientific literature, but do believe it is substantially correct.

⁶Recently, computer retailers have begun marketing older machines at a large discount, but this is usually done where memory, or other peripherals represent the obsolescence, not the processing capacity itself. That was not a common practice during the sample period.

⁷Of course, the retail price would be available, but it seems that the price of this major component would change in close synchronization across all manufacturers. I shall address the importance of firm costs later.

⁸This price differential dropped somewhat near the end of the sample period, but remained substantial.

Concentration

Market structure has a well developed quantifiable aspect in several indices of market power. The two most common of these and their estimated ranges for the microcomputer market during the sample period are identified in Table 4-1.

Table 4-1, Indices of Market Concentration, The Microcomputer Market

	Formula	Range	Low Estimate	High Estimate
Concentration Ratio	$CR4 = \sum P_i$	$0 \leq CR_4 \leq 1$	20	35
Hirschman-Herfindahl Index	$\sum P_i^2, 0 \leq P_i \leq 100$	$0 \leq HHI \leq 10,000$	250	1000

These estimates were drawn from the Computer Industry Almanac, 1994-5. The HHI estimate weighs the largest firm more heavily than many other indices. In this sample, only during the highest concentration period would a merger between the two largest firms be contested by DOJ under *Guidelines*.⁹

Evidence of Competition

Despite this rather narrow market definition, the supply side of this market was relatively competitive. This market easily fits the description of *workable competition* (Clarke, 1946). The importance of establishing the degree of competitiveness in this market is critical for two reasons; to establish price rigidities in workably competitive firms as a representative firm in a macroeconomic model, and to reduce the possibility that

⁹The data employed in this dissertation is quasi-proprietary, in that 25% of the firms used in the sample have data collected both directly from the firm and from published sources. I have promised not to disclose the data collected from the firm itself in published form. This precludes my naming firms in connection with specific data. I will gladly answer questions from scholars. Please see Appendix A for details on contacting me and using the data.

these firms are engaged in a pricing game. A textbook description of workable competition (Scherer and Ross, 1992) suggests that certain market structure, conduct, and behavior criteria be met to establish this condition in markets. Likewise, the *Department of Justice Merger Guidelines* employ a number of indices and criteria to establish the degree of competition in a market. *Guidelines* suggests that two major conditions be analyzed to establish a high degree of competition; to what degree are firms capable of freely entering and exiting the market, and how simple is it for firms already in the market to create substitutes for newly introduced products.¹⁰ This section describes the market, using indices where available, and analyzes competitiveness features of these two characteristics.

Beginning with market behavior, workable competition requires that product development be responsive to consumer demand and that "opportunities for introducing technically superior new products and processes should be exploited" (Sosnick, 1958; Scherer and Ross 1992). Indeed, this market may well serve as the benchmark for this condition for quite some time. Also, "success should accrue to sellers who best serve consumer wants" (Clarke, 1946; Scherer and Ross 1992). This was particularly evident in the microcomputer market where 'churning' among the top four firms (changing leadership in annual sales) is very evident. At least by these criteria, the microcomputer market exemplified workable competition.

There is scant evidence to suggest the existence of firm collusion, tacit collusion,

¹⁰*Effective competition*, a definition offered by William G. Shepherd [1997] has a euphonic name, but requires fewer standards of competitiveness, and so will be met by establishing either workable competition or meeting the DOJ *Merger Guidelines*.

predation or limit pricing. Sales promotion tended toward product attributes, and indeed in our sample price discrimination does not appear to be widespread or harmful. These are important elements of *workable competition* (Scherer and Ross, 1992).¹¹ There may be price discrimination in microcomputer sales but it did not appear widespread at the wholesale-retail level. Price discrimination seemed to occur at the retail level.¹²

The market structure analysis was perhaps most telling (or at least quantifiable) in this case. Firm entrance is dramatic, with several of the firms being less than ten years old at the time of the sample.¹³ This is important from a *Guidelines* influenced Federal Trade Commission ruling that "evidence of actual entry, especially recent and frequent new entry is highly probative" in establishing competition (Kaserman and Mayo, 1995). *Most telling perhaps is that within months (sometimes weeks) of the first introduction of the 80486 system all other 11 firms in the sample followed with their own substitutes.*

This market is highly unconcentrated, exhibits few barriers to entry and a textbook sensitivity to new technology and consumer demand. This market is good example of workable competition.

¹¹Although there are extensive studies of the computer industry, I could find no analysis, employing a similar market definition during this period. The rapid change in this industry suggests that non-contemporaneous studies, or those using much broader market definitions are of little use here.

¹²This usually took the form of additional software or hardware included in a sale price.

¹³Of course, the market for microcomputers was scarcely older than this at the beginning of the sample period, but most new products are introduced by old firms. Many of the firms in the sample are decades old and entered the microcomputer market only recently.

Anecdotal Evidence of Hierarchies

Selection of this market was made due to specific characteristics of the industry, especially the need for manufacturers to make timely decisions in order to remain viable. Of course all industries require this, but few to the degree that a rapidly changing technology based industry does. The industry literature does provide some information on specific firm hierarchies, and evidently, a wide variety of activities are undertaken by firms. The degree of supervision and communication flows are however, not discernable from a wire diagram. Figure 4-1 illustrates a domestic firms structure. Compare this with the foreign firm structure in Figure 4-2¹⁴

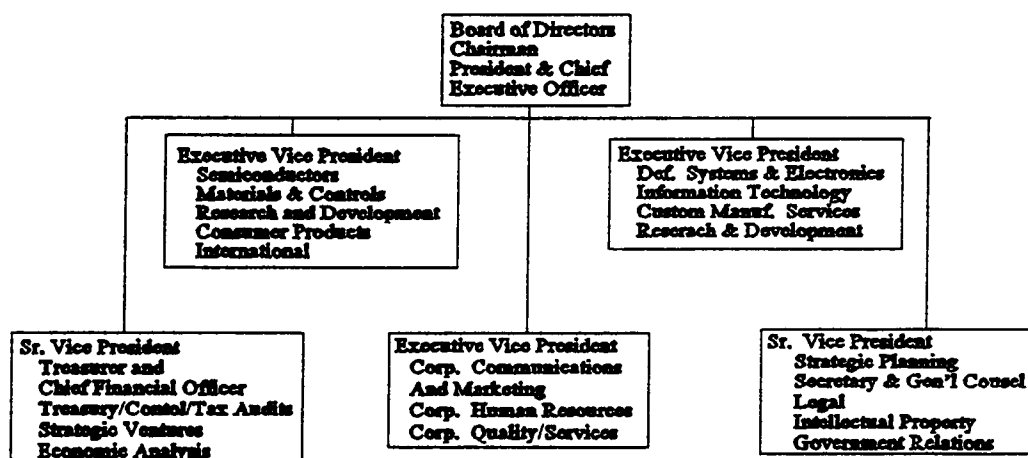


Figure 4-1, Organization Wire Diagram, Domestic Firm

¹⁴Both charts are reproduced from Maurer, John, et. A., eds. Organization Charts, 2nd ed. Gale Publishing, Detroit MI, 1995.

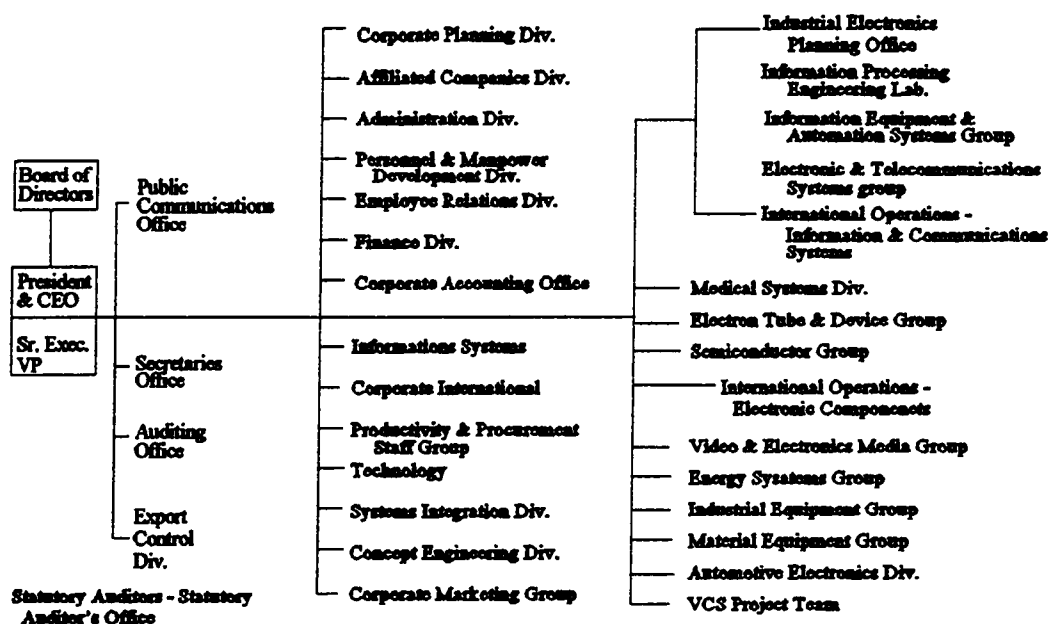


Figure 4-2, Organization Wire Diagram, Foreign Firm

In addition to these organization wire diagrams, there are numerous references to the hierarchial composition of the firms in this industry. What is not clear from the literature is the hierarchial level at which prices are set. This is less problematic than it first appears. While it would be helpful to know the name and position of the price setter, it is clear that this person would likely gather information from a wide variety of sources prior to making this decision.¹⁵ These effects are as important to the establishment of a

¹⁵In this industry I was unable to find strong evidence of the position of the actual price setter. I was repeatedly told it was the responsibility of the top management—which is true of most duties. One may delegate authority, but not responsibility. By analogy, several faculty members in this department supervise graduate teaching assistants in introductory economics classes. Each, including myself, require that our TA's administer quizzes to our students. Some professors scrutinize the quizzes prior to their being administered; while others do not see them at all, for reasons quite unrelated to the immediate concern for their quality. Each faculty member is responsible for the grading decisions, but obviously the level of hierarchial decisionmaking varies, and it is not really possible for an outside entity to observe or record this without our unanimous assistance. This type of assistance was quite absent in the firms in this sample.

hierarchy as is the actual position of the price setter. Consequently, evidence of hierarchial delays or sluggish management—a reoccurring theme in management and popular literature—may be helpful in understanding this industry. The microcomputer industry is rife with anecdotal evidence of hierarchial delays, beginning with general observations about the growth of the industry:

“Electronics companies in the U.S. are finally reaping the rewards of emphasizing sound management instead of focusing only on technology. Net income and return on equity (ROE) are soaring as a result.” (CIA, 1995).

Realization that hierarchial layers effect decisionmaking is also evident:

“In the prosperous 1980's [X] increased its management layers and slowed the decisionmaking process. In late 1990 the company restructured, trimming its work force by 8% (about 400 employees).” (CIA, 1995)

Indeed, the largest firm in this sample ‘restructured’ several times during the early 1990's with what was characterized as a ‘downsizing’ of 40,000 middle managers. This firm was described as “Burdened with a bloated bureaucracy that was slow to react to the downsizing and networking trends in the computer industry” (CIA, 1995, pg 134).

In contrast, the smallest firm in the sample was described as having “developed an edge over its competitors by establishing close relationships with its suppliers and distributors. [X] is known to have shipped \$500,000 worth of product on a handshake alone and without the assistance of a band of lawyers” (CIA, 1995). It is difficult to imagine either of the firms illustrated in Figures 4-1 or 4-2 being able to react so rapidly.

Of course, these anecdotal observations do not possess the hard data so critical to this investigation, but clearly, the problem of hierarchial delays appears to exist in this industry, and is recognized by industry publications.

Price Setting

Determination of actual price setting authority in each firm in this industry is difficult, but some evidence of the manner in which firms set prices may be helpful in understanding the nature of hierarchial behavior. What I am suggesting is that the simple process of setting price may be ensnared in hierarchial delays.

Anecdotal evidence from the microcomputer market suggests that a burdensome price setting process may exist within the microcomputer industry. Discussions with firm employees, especially in marketing divisions suggests that prices for goods are set at the highest levels of the companies. The rationale for this process is straightforward. Each of the companies in the sample are built around the core business of computers. Top management is characterized by trade studies as intimately involved in product design and development. The price for a premier product line is an integral part of the what trade specialists call the "competitiveness" of a product. Prices at the wholesale level do not vary across the U.S. market and are very transparent, hence local managers cannot vary price to meet local demand changes (though they certainly transmit these data to their supervisors). Simply pricing, like product design and development in this industry, is a very centralized process. Even delivery costs to retailers tend not to be differentiated by the firm but are merely the carrier costs (UPS, FedEx, etc.). Even if a lower layer of management is responsible for price setting the larger the firm hierarchy the slower that process should be if the price setter is obtaining relevant demand and cost data from within the firm.

If demand or common cost shocks were recognized and acted upon simultaneously

by the firms in the sample prices should change in synchronization. Though, if hierarchial delays occurred, but firms were homogeneous, then price adjustment would lag demand or cost shocks due to the process of information flow and decisionmaking within the firm. Also, cost shocks should affect price changes more rapidly than demand shocks since they are internal to firms. This may be a nominal price rigidity but would still lead to synchronized price adjustment.¹⁶ Idiosyncratic cost changes would also lead to staggered price setting. A further investigation of the importance of hierarchies in real world pricing must be addressed empirically.

Computer Market Data

I will present the data characteristics in the empirical portion of this chapter; however, presenting the sources and type of data will be helpful in understanding their use prior to testing the hierarchial delays model. These data are price listings of the Manufacturer's Suggested Retail Price (MSRP) for 80486SX computers and components in the 25-50MHZ range. These include central processing units (CPU's), partially and fully assembled systems and memory add-ons. The observations are for 36 months, ranging from January 1993 through December 1995. All of the sampled products were available throughout this time period. The 356 products are from twelve firms and represent the overwhelming majority of microcomputers sold to the American public during this period. Main frame computers or mini-computers, sold by several of the

¹⁶As I explained in Chapter 2, nominal rigidities, if occurring with synchronized price adjustment is not sufficient to explain the magnitude and persistence of observed business cycle activity.

companies in this sample, are distant substitutes for this good.¹⁷ These data were obtained from a computer retailer, who provided the prices, and a brief product description.

Prices in this market were, during the sample period, disseminated on a 3.5 inch diskette to all retailers who purchased wholesale computers from manufacturers. This diskette was mailed monthly, with updated prices and additional products. Products would be ordered in advance by the retailer, typically with a short (10 day) delivery period. This would be longer during the winter holidays. Consumers desiring a system, which was not in the inventory of a particular retailer, could usually receive a price quote directly from the retailer, for delivery. It was not common (probably unknown) for the computer manufacturer to vary prices during the month; they instead waited for the new updated price list before changing price. Today the mailed diskette has been replaced by INTERNET price listings

A criticism of MSRP is that it is only a proxy of a transactions price. This is undoubtedly true; however, discussions with the original provider of these data as well as a number of other retailers, in this market and others, suggest that the MSRP changes only when the wholesale price changes and vice-versa. I will assume that the price changes are monotonically related to the true magnitude and frequency of price adjustment. This may not be true of the retail price.¹⁸ It is the frequency of price change, not the magnitude that

¹⁷Mainframes were sold primarily to government and academia, while mini-computers are characterized by architectures developed for specific tasks, such as database management and retrieval. Both main and mini systems were often sold with microcomputers in a product mix. None of these appear in the sample.

¹⁸This does not alter the macroeconomic relevance of the conclusions.

is of interest here.¹⁹

The explanatory variables have been collected from multiple sources, including discussions with human resource directors, *Hoover's Guide to Computer Companies*, *Standard & Poor's Industry Survey's*, the *Computer Industry Almanac* and several computerized databases at the University of Tennessee Library. Individual citations are noted in the data description. Several problems endemic to economic data pose particular problems in this sample. These problems preclude several sophisticated testing procedures. This reduces the ability of this model to explain the actual depth and structure of hierarchial delays, however a detailed empirical examination of hierarchies is outside the scope of this dissertation. I am in search of the effects of hierarchial delays.

Alternate Theories of Price Stickiness

From the earliest inception of this research, selection of the appropriate markets for analysis have focused on two important, and related criteria. First, that they be relatively competitive, and second that the selection of market eliminate from consideration as many alternate theories of price rigidities as possible. The important theories were identified by Blinder [1990] for analysis in his survey. These theories explain various types of price rigidities, his summary is reproduced in Table 4-2.

¹⁹The correlation between MSRP and the frequency of price adjustment is -0.04.

Table 4-2, The Twelve Theories (Blinder 1990)

Theory Name	Brief Description
Nominal contracts	Prices are fixed by contracts
Implicit contracts	Firms tacitly agree to stabilize prices, perhaps out of "fairness" to customers (Okun 1981)
Judging quality by price*	Firms fear customers will mistake price cuts for reductions in quality (Allen 1988)
Pricing points	Certain prices (like \$9.99) have special psychological significance (Kashyap 1992)
Procyclical elasticity*	Demand curves become less elastic as they shift in (Bils 1989; Shapiro, 1988)
Cost-based pricing with lags	Price rises are delayed until costs rise (Gordon 1981; Blanchard 1983)
Constant marginal cost*	Marginal cost is flat and markups are constant (Hall, 1986)
Costs of price adjustment*	Firms incur costs of changing prices (Rotemberg 1982; Mankiw 1985)
Hierarchical delays	Bureaucratic delays slow down decisions
Coordination failure*	Firms hold back on price changes, waiting for other firms to go first (Ball and Romer 1991)
Inventories	Firms vary inventory stocks instead of prices (Blinder 1982)
Delivery lags, service, etc.	Firms prefer to vary other elements of the "vector," such as delivery lags, service or product quality (Carlton 1990)

*Significant in survey at the .10 level

Blinder's survey results favored a subset of these models. Among those rejected in the survey was hierarchical delays. I believe this was an error. Alone among these theories, hierarchical delays suggest managerial inefficiency. The alternate theories imply aspects beyond the immediate control of the manager, which suggests a less than forthright response.²⁰ Price stickiness as a result of these alternate theories may occur

²⁰This highlights the potential error of asking agents to describe their behavior in lieu of observing it. Even if the respondents were truthful, if they had knowledge of hierarchical delays as managers it would likely be their duty to ameliorate the problems. Also, the number of respondents in larger firms who picked this theory was higher than in the smaller firms. Nonetheless, Blinder's survey represents an important contribution to my understanding of price rigidities, and I admire its method and scope.

simultaneously with hierarchial delays. These compounded price rigidities provide stronger support for New Keynesian Macroeconomic theory and are perfectly acceptable to this line of inquiry. The existence of hierarchial delays is contingent upon the refutation of theories that provide the same predictions of price rigidities—that they will be correlated with measures of firm size and hierarchial structures.²¹ Again, the markets chosen for investigation in this dissertation were specifically selected to eliminate from consideration many of these theories.

A number of these theories may be dealt with heuristically, others empirically. I shall address each. First, contracts, either implicit or nominal require some explanation for their existence within the optimal behavior of both parties to the contract. In this sense they must be explained by some additional aspects of the market such as supply inconsistencies, et cetera. Blinder [1990] identified a critical problem with this theory in that contracts typically specify aspects other than price. In this context the optimality of contracts, to ensure quality or quantity is apparent. However, prices obtained in this study are for all computer retailers, suggesting these contracts must extend across many firms (retailers). Also the nature of delivery (replacement of recently sold items) suggests this is not a likely form of rigidities here. Since the market structure suggests a large number of firms selling and a large number of retailers buying computers, this theory may be effectively discounted. The prices are common to all retailers, and are now electronically transmitted (and posted on the INTERNET) to all client firms (retailers). In

²¹This was detailed in Chapter 3, and will be further explained in the remainder of this chapter, along with additional predictions.

many discussion with computer retailers in the Knoxville and Washington, D.C. area I have concluded that long term contracts that set price do not exist except at time of sale for a lagged delivery (three or fewer weeks except during the winter holidays when it is somewhat longer.) *Nominal contracts* in this market seem an inappropriate theory. Indeed the transparency of prices (in *Computer Shopper*, etc.) suggest against this as a credible explanation. Additionally, the *implicit contracts* theory is weakened by the market structure of the firm (many sellers, a very large number of buyers). Nominal or implicit contracts, as a cause of price rigidities in this market are not important theories.

Judging quality by price seems improbable given the apparent homogeneity of the products as well as the "information heavy" nature of the computer market which should preclude this poor estimate of quality by a rational consumer. *Pricing points* suggest industry, not firm level price rigidities and so are inappropriate to this market.²²

Procyclical elasticity is suggested for markets experiencing downward shifts in demand, for example, during a business cycle. That is contraindicated in the market for microcomputers.²³ *Cost based pricing with lags* does not fit the data well, with a majority of price changes being downward (this model also suggests asymmetry in price adjustment). Indeed costs may have dropped, but prices for the main component, the

²²Of course, it is this inter-industry price rigidity comparison which Blinder so correctly identified as a flaw in many price rigidities theories. Additionally, the data in this sample do not appear to have *pricing points* (see Appendix A.)

²³I have not estimated a demand curve for microcomputers, taking its increase during the early 1990's as axiomatic. Procyclical elasticity suggests asymmetric rigidities.

INTEL microcomputer chip remained relatively stable during this period.²⁴ Also, as I mentioned earlier, if this were a valid theory in this market it should affect all firms with similar frequency. Thus any rate of price adjustment should be similar across all firms. *Constant marginal cost* suggests that firms in any industry are operating in a flat region of their marginal cost curve (similar economies of scale). This implies that firms should be adjusting prices (mostly upwards) at the same rate. This is especially true in this market where input costs (primarily microcomputer chips) are shared by all firms in the market. Dissimilar rates of price adjustment anecdotally contradict the prediction of this model.

Costs of price adjustment are certainly a factor in explaining inflexible prices in this market. Prices change no more frequently than each month, this is likely due to menu costs. This is a *compounded form* of inflexible pricing and need not be investigated in detail in this market.²⁵ Menu costs—in the strictest sense—are the costs associated with adjusting prices such as printing costs of menus, or signs, and in this market are the mailing costs of 3.5 inch diskettes.²⁶ These pure menu costs imply a lump-sum or concave cost of price adjustment. Hence all (or most) products within a firm should change prices together. That this does not occur in this market as is clearly illustrated by observing the proportion of products that changes prices in each month. A low

²⁴Indeed the marked concentration of the microcomputer chip industry (Intel holding 70% of market share during the sample period) suggest strong price rigidities upstream in this market. There were few apparent price changes of INTEL chips during this period (on the retail market). Though this does not allow for possible price changes at the wholesale level which are unobservable.

²⁵Menu Costs may contribute to the rigidities in this market but since these fixed costs of price adjustment are shared by all firms in the market they cannot explain the differences in rates of price setting that I have found.

²⁶More generally they may include the labor costs of compiling information, managing data bases, etc.

proportion of products changing price strongly implies that costs of price adjustment are not the sole cause of the rigidities I have found. However, they may be nominal price rigidities. Tommasi [1992] characterizes staggered price setting of individual products as evidence of *decision costs*.

Thus hierarchial delays would imply linear or convex costs of price adjustment. The macroeconomic consequences of convex versus lump sum costs of price adjustment differ. Recall that with the menu cost models, net revenue gains from adjusting price must be greater than costs to optimally generate a price change. Therefore, convex costs of price adjustment imply that firms will only slowly adjust their prices in response to demand shocks—generating price inertia. This is illustrated in Table 4-3.

Table 4-3, Proportion of Monthly Price Changes

	1993	1994	1995
JAN	—	0.093664	0.121212
FEB	0	0.126722	0.049587
MAR	0	0.132231	0.00551
APR	0.022039	0.15427	0
MAY	0.008264	0.068871	0.082645
JUN	0	0	0.046832
JUL	0.019284	0	0.022039
AUG	0.011019	0.126722	0
SEP	0.011019	0.137741	0.013774
OCT	0.123967	0.027548	0
NOV	0.060606	0.030303	0
DEC	0.0027548	0.190083	0

Firms in this market share common fixed costs of price adjustment (*Computer Shopper*, etc.) which suggests that the average fixed costs of price adjustment are smaller for larger firms (those with more units sold) and should therefore cause more frequent adjustment of prices—*unless they experience hierarchical delays*.

Coordination failures suggests that firms are engaged in a pricing game as in Sweezy's [1939] kinked demand curve or a number of other older pricing models (Stackelberg, 1934; Chamberlin, 1929) and should be heuristically eliminated from consideration given the market structure of the industry. This may also be investigated by viewing the simultaneity of price adjustment by different firms for the same product, as was illustrated in Table 4-3.

While I cannot determine the cause of price changes (supply or demand changes), two important issues emerge. Since most of these products share similar input costs (microcomputer chips) any supply shock should affect all the firms in the market. Likewise, since they operate in the same market, demand shocks should be shared. The absence of coordinated price setting suggests some other phenomenon is at work.

Table 4-3 illustrated the proportion of products that change prices monthly. Obviously, no more than 20% of products change prices in any given month. This strongly suggests that no coordination of price changes is occurring. Though visually the lack of coordination is quite pronounced, earlier work (Lach and Tsiddon, 1992) suggests two additional tests for asynchronization. The first, is to examine the autocorrelation between the monthly proportion of products that change price. Uniform staggering would generate no autocorrelation between price changes; perfect synchronization yields a

string of negative autocorrelations up to the average duration of fixed prices (15 months). The results of this test strongly support staggering as the appropriate description of price adjustment in this market.²⁷ Another method offered by Lach and Tsiddon is to view the standard deviation of the proportion of price changes made each month with that which would be generated by synchronous price adjustment. Synchronous price adjustment suggests we would observe several months with no price changes, followed by a 100% price change. This would generate very high standard deviations in the proportion of prices that change monthly (≈ 25.82). The actual standard deviation is 0.238, which is substantially smaller than synchronized price adjustment figure. It is obvious here that these price adjustments are heavily staggered.

A second interpretation is that price coordination of the type explained by Ball and Romer [1989] and more recently Tommasi [1992] and Lach and Tsiddon [1996] is not occurring. (The latter two add menu costs into their explanations). These authors suggest that if price adjustment is coordinated, then the explanation of price rigidities I propose (hierarchical delays) may be inappropriate, and price rigidities may be better explained as a game theoretic form of price determination.²⁸ If individual firms change

²⁷The autocorrelations between monthly price changes are 0.627, -0.566, 0.382, -0.057 and 0.148 respectively. Only the first two are significant, indicating asynchronous price adjustment. Indeed, the price setting behavior is characterized as an AR(1) process, with a t-statistic of 3.132. This is highly significant and positive indicating price changes as described through optimal lag length are *highly asynchronous*.

²⁸Ball and Romer [1991] actually make predictions of synchronized price adjustment (when firm level shocks are much smaller than industry level shocks). This was exemplified by a comparison of an adjoining gas station and grocery store adjusting prices asynchronously due to firm level shocks (gasoline prices) outweighing economy wide shocks (money stock changes). The microcomputer market was selected so that the homogeneity of products necessarily subordinates firm level shocks to economy wide (or industry wide) shocks. The type of homogeneity I describe is that of the non-address (Chamberlinian) homogeneity. Thus, if a firm exits the market, the excess demand created by this move will be absorbed equally by all market participants, not just by those with the nearest hedonic address. Thus coordination failures as described by

prices only on a small percentage of products each month then something other than immediate changes in input costs (primarily microchips) or demand shocks are generating the price change. If this were not so, then a much higher proportion of products would change prices each month, since they are all in the same market, and a high proportion of products share the same chip type. An illustration of staggering is offered in Table 4-4.

TABLE 4-4, Price Change Data, Selected Time Period

	Price Increases	Price Decreases	Proportion Increase	Proportion Decrease	Change in Average Price
93:10	10	37	0.028	0.104	-0.023
93:11	9	18	0.025	0.051	-0.086
93:12	0	2	0	0.001	-0.001
94:1	17	34	0.048	0.096	-0.022
94:2	37	22	0.104	0.062	0.029
94:3	21	25	0.059	0.070	-0.001
94:4	45	20	0.126	0.056	-0.006
94:5	9	10	0.025	0.028	0.005
94:6	0	0	0	0	0
94:7	0	0	0	0	0
94:8	15	39	0.042	0.110	-0.015
94:9	1	5	0.001	0.014	-0.004
94:10	1	7	0.001	0.020	-0.001
94:11	7	1	0.020	0.001	0.008

these authors must be ruled out unless price adjustments are highly (perfectly?) synchronous across firms.

The proportion of firms adjusting prices (at least one) is an additional measure of the degree of synchronization of price adjustment.²⁹ It is apparent that not all firms change even a single price in a given month. This 'cross-firm' staggering is quite pronounced. Even when several firms change some prices in a single month, the number of its total prices that any one firms changes in a month is quite low. This suggests a strong lack of coordination among firms for price adjustment. The proportion of firms changing at least one price is illustrated in Figure 4-3.

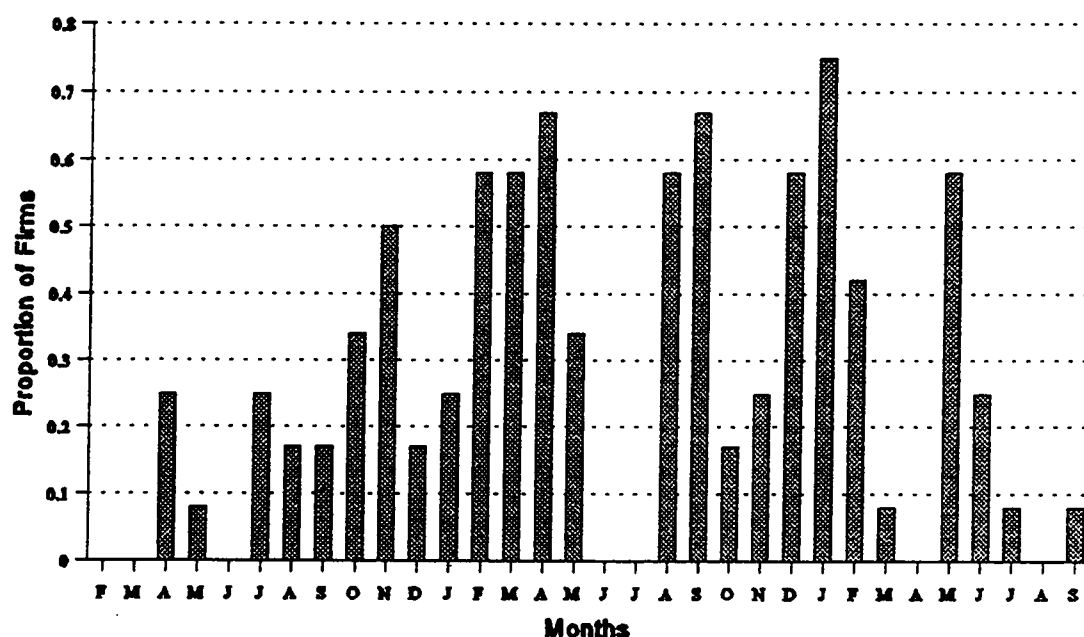


Figure 4-3, Proportion of Microcomputer Firms Changing Price On At Least One Product, Feb 93-Oct 95

²⁹This should be high, only if these figures are 100% should coordination of price changes be inferred (Ball and Romer, 1991). Given the high degree of homogeneity in these products, something other than demand shocks are occurring

A further explanation of the apparent lack of coordination among firms is that the proportion of price changes comprise all, or a majority of a subset of products. This may be investigated by observing the coordination of price changes across subsets of the products. Here, as before, I have chosen the microcomputer speed, and found that relatively low proportions of each product changed price in each month (this held true for hard drive sizes as well). This suggests that changes in the cost of a chip are not a significant contributor to a change in price of the product. If this were the case, all products using a single chip size should change in a single month.³⁰ See Figure 4-4.

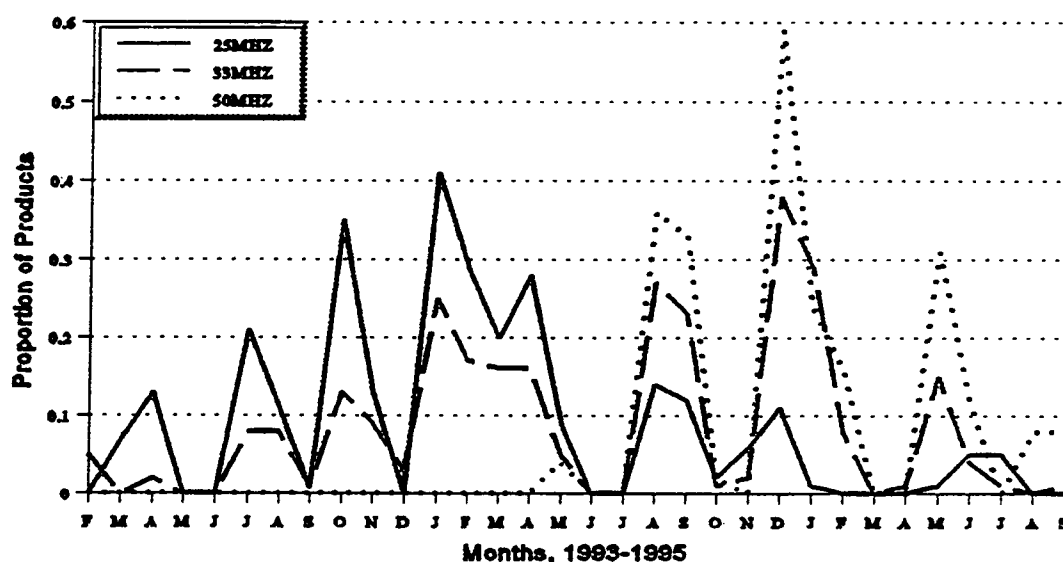


Figure 4-4, Price Changes, by Chip Speed, Feb 93-Oct 95

³⁰Even if contracts for chips were staggered across firms (something that cannot be determined) a change in the price of microchips, as advertised, should lead producers to change prices as this alters the opportunity cost of chips.

This implies no further analysis of these models are necessary. Coordination failures of the type described by Ball and Romer [1989] and others, or earlier authors describing oligopoly pricing are inappropriate to this market.³¹

Inventories, a theory that suggests firms allow quantity adjustment to replace price adjustment is not testable given the data limitations. However, this is Blinder's theory, and was not strongly supported in his survey. I accept his rejection of this theory.³² The final theory, *delivery lags*, suggest that firms vary vectors of service hedonics other than price (service, delivery lags, quality) as demand varies. This seems improbable in that the variability of these factors is relatively limited in this market.³³ Late deliveries and reduced or varying service agreements do not seem realistic within this context, especially since price does change in a period shorter than adjustments to warranties, on-line consumer services, etc. could be modified.³⁴

This dissertation is searching for nominal price rigidities. The staggered price setting illustrated above exhibits many of the characteristics of real price rigidities but is outside the scope of this study. The staggered price setting noted above is an important

³¹ Additionally, none of the earlier models of oligopoly pricing predict firm level variation in the frequency of price adjustment as does the hierarchical model.

³² If this theory were correct, it seems that larger firms, although they would have economies of scale in warehousing, would have much higher *marginal costs* in failing to adjust their prices due to much larger loss in sales.

³³ A number of industry publications noted that on-line services, peripherals and accessories tended to be provided by smaller, newer firms in the late 1980's. I used a similar argument in creating the *principal-agent* problem in Chapter 3. There is no implied similarity between that theory and price rigidities caused by this theory. It was merely a helpful device for illustrating hierarchical delays.

³⁴ Product characteristics do not change during the sample period. All the products included in the survey were available throughout the sample period.

adjunct to the hierarchial delays model for two reasons. First, since it is not occurring in the manner suggested by Ball and Romer [1989] it does not imply coordination failures. These data do not support synchronized price adjustment in this single industry. These firms are not experiencing idiosyncratic shocks since they are producing the same good. Second, it is obvious that each firm is changing prices on a subset of goods, and the subset of goods is quite homogenous. This was identified by Tommasi [1992] as strong evidence of *decision costs* in price setting.³⁵ I suggest this is in fact what is occurring in these firms. Having dealt with the several existing models of price rigidities I shall now begin with an empirical investigation of price rigidities in the microcomputer market.

Summary Statistics

The five major data sources, the *Computer Industry Almanac* (CIA), *Standard and Poor's Computer Industry Survey* (S&P), *Hoover's Computer Guide* (HCG), databases at the University of Tennessee Library system (UT) and conversations with Human Resources officials.³⁶ The price data were collected from a computer retailer from east Tennessee (who had previously owned computer retail shop in Texas). See Table 4-5.

³⁵As I mention in Chapter 3, *decision costs* contribute, but are not the sole cause of hierarchial delays.

³⁶I initially collected every possible variable I could obtain across all the firms in the sample. My rationale for this approach will be apparent later. Appendix A includes the raw data.

Table 4-5, Summary Data on Price Changes

Firm	Mean Frequency of Price Adjustment (during sample period, 36 months)	Average Price Change (percent of total price) (Absolute Value)	STD Dev of Price Change (Absolute Value)
B	2.46667	0.202379	0.961874
E	2.93333	0.045255	0.043081
F	2.2973*	0.154794	0.182888
H	4.7619*	0.197043	0.981233
M	2.85185	0.149501	0.388465
O	2.83333	0.129942	0.091359
P	3.31579*	0.089712	0.083364
U	2.33333	0.075435	0.098243
V	3.30339*	0.102093	0.112668
X	2.21622*	0.047583	0.076833
Y	1.78261*	0.060902	0.03359
I	3.0000	0.093967	0.090272

*Individually statistically significant from the mean of the MFPA at the .10 level ,

Table 4-5 illustrates that the MFPA varies across firms, and that the magnitude of mean price changes across firms varies about 15%. This is illustrative only, it is not clear whether these are relatively large or small price changes, or if the differences in their variances are unusual.

In order to illustrate statistical deviation of a set of subcomponents, I partitioned the data with respect to the Chip speed into three large and one small subset of data.³⁷ The large subsets were components with chips, the small subset was composed of products without chips included. The following figures illustrate price characteristics

³⁷I would like to emphasize that the size of this data set is much larger than any previous work on actual price setting , except for the work by Gardiner Means [1935].

within the partitioned data. It is clear from this figure that the average price change for these goods are all near 10%. Further, they vary widely in both magnitude and direction during the sample period. The mean price change, for three subcomponents, 25, 33 and 50 MHZ systems is illustrated in Figure 4-5.

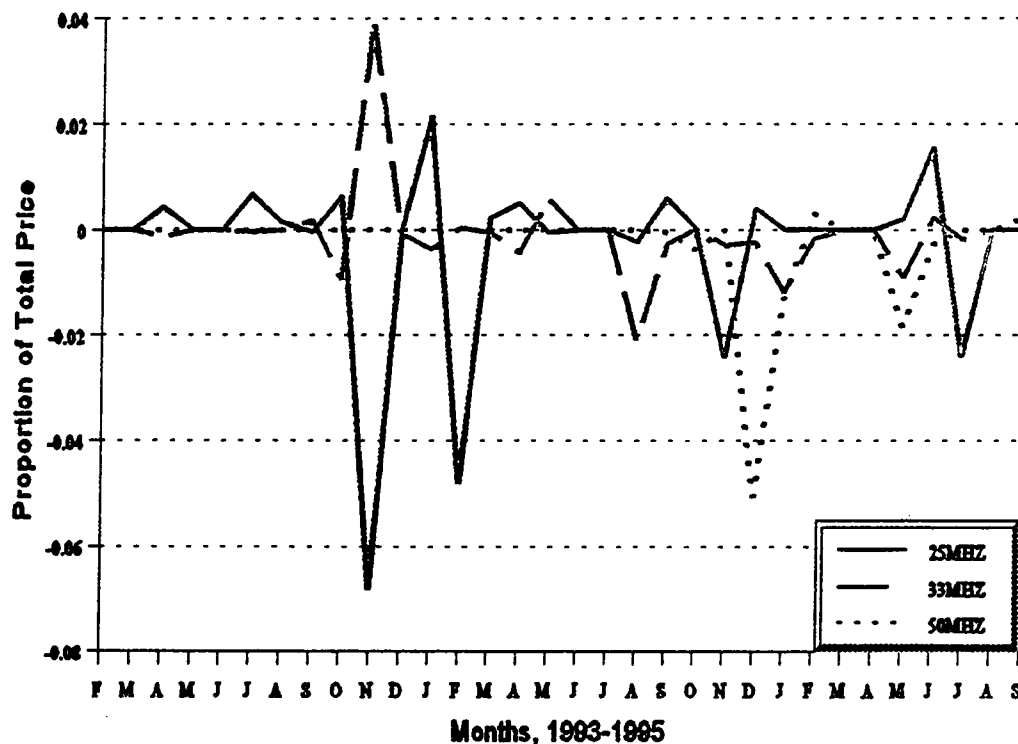


Figure 4-5, Mean Price Change, Feb 93-Oct 95

The staggering of price adjustment has been identified in a number of studies as strong evidence of nominal rigidities. These studies include Lach and Tsiddon [1996], Sheshinski and Weiss [1993], and Tommasi [1992], as well as those mentioned in the previous section. The staggering of prices suggests that firms are not changing prices in a Walrasian *tâtonnement* process. Though these studies have not analyzed the market structure of the industry, it is significant that staggered price adjustment occurs in such a competitive market as that for microcomputers.³⁸

Prior to exploring tests for the existence of hierarchical delays in these data it is essential to address competing theories of price rigidities. These have been ruled out, or explained within the context of these data.

Empirical Analysis of Price Rigidities in the Microcomputer Market

Before detailing the model I would like to describe the variables and some potential problems with the data. A potential dependent variable, the mean frequency of price adjustment (MFPA), was recorded over a three year period. This is simply the mean, of the frequency of price adjustment in each firms. This limits the number of observations to be tested to twelve, the number of firms in the sample, which is obviously problematic. The Frequency of Price Adjustment (FPA) for the individual goods yields 356 observations, the number of goods in the market. This is a much superior sample size. The distribution of this variable appears in Table 4-6.

³⁸This is not predicted in any traditional model, nor is it explained by any of the existing explanations of nominal or rigidities in the literature.

Table 4-6, Frequency of Price Adjustment, The Microcomputer Market³⁹

FPA	1	2	3	4	5	6	7	8	9
Percentage	0.267	0.293	0.166	0.127	0.079	0.039	0.014	0.006	0.008

The independent variables are not so concisely recorded by time, for a variety of reasons. Firstly, private firms do not typically report the financial data required by the Securities and Exchange Commission (SEC) for inclusion into a stock exchange market. Also, foreign firms are not subject to SEC rules concerning disclosure if their stock is traded in a non-U.S. stock exchange. These problems affect about one third of the observations. Also of concern are the variations in fiscal years reported by the companies. Thus, annual reports (the type available) did not correspond across all firms. This problem is endemic to firm level data. Also, changes in accounting procedures during the sample period due to Financial Accounting Standards Board (FASB) rule changes do not permit reasonable comparison among some years.⁴⁰ Additional problems, such as rounding errors, differently timed employment figures, and growth rates calculated by different methods may introduce bias into the estimation results.⁴¹

A result of these data problems is that dynamic analysis is not possible. This

³⁹The dependent variable in the empirical sections is the frequency of adjustment out of possible price changes (monthly) thus, for the empirical tests $FPA \in [0,1]$.

⁴⁰For example, FASB statement 106 changed the reporting process for long term medical costs associated with employee medical plans, thus distorting the comparison between 1993, and 1994 profit reports for some firms.

⁴¹Finally, some missing observations have been estimated using a technique suggested by Maddalla [1988]. These problems are not really dissimilar to many economic data, but are more carefully noted here. In one instance, the human resource manager gave different figures than the published sources. I twice confirmed the data with the human resource department before settling on their figure. No estimated values appear in the final results.

eliminates the ability of this research to explain how firms react to the adverse effects of hierarchial delays.⁴² Another result is that observations of explanatory variables are composites of three years, representative observations or proxies. Though their hierarchial structure certainly changed during this period, I will further assume that the effects on decisionmaking and information flows require a lengthy period to change.⁴³ This is quite reasonable, and suggests that changes in hierarchial structure have minimal effects on pricing delays during this short period. The selection of this market, during this period, was specifically made to capture a single product during the majority of its active lifespan.⁴⁴

The empirical testing I will conduct is designed to test the marginal effects of a number of hierarchically related variables on a proxy for hierarchial delays, the frequency of price adjustment. Simply $Y = X\beta + \epsilon$, where the dependent variable decreases in hierarchial delays, and the dependent variables are measures of hierarchies. The theory of hierarchial delays developed in Chapter 3 suggests families of variables, with predicted signs in empirical tests. I have categorized them into five broad areas from which actual data may be collected. Their explanations are straightforward. The more workers, N ,

⁴²While this is a compelling question it does not fall within the scope of this dissertation. This question will be addressed in Chapter 6 as a suggested area of future research.

⁴³Despite these shortcomings, there should be no significant problems in the actual outcome of the model testing. Much of the hierarchial literature (see Chapter 3) suggests the effects of hierarchies are not quickly created or ameliorated. I will assume that the length of the sample period, 36 months, is an appropriate static view of the firm.

⁴⁴A longer observation period introduces the unavailability or obsolescence of this good. Also, some price changes are sufficiently infrequent that variation in the dependent variable of annual, semi-annual or quarterly observation would be insufficient. A longer time period may also capture some critical changes in the market structure of this industry, hence altering the fundamental direction of this research which is to explore price rigidities in workably competitive industries.

ceteris paribus, the slower information transmission as it is transmitted through workers or hierarchies. Even though actual price setting levels may vary, this variable should be closely related to the existence of hierarchies. Also, the number of decisionmakers, M , influences the speed of decisionmaking. The more decisionmakers, the faster decisions are made (though transmission between managers or hierarchial levels may slow).

Additionally, the smaller the span of control, S , the faster the decisionmaking (see Mehta, 1998, and Williamson, 1968). Since managers both supervise and coordinate, the less time spent on supervision, the more on coordination. Price setting is obviously a coordinating activity within firms. This is the sole variable previously developed in the literature—though it has not been empirically tested. The difficulty of coordination, C , is the ease with which managers may decide appropriately. For example, the larger the number of products on which to decide, or the farther the spatial separation of markets, the slower decisionmaking. Finally, the more productive the workforce, the faster the decisionmaking. This should be most true for decisionmakers. Since hierarchies are not measurable I must rely on proxies; families of which appear in Table 4-7.

Table 4-7, Potential Variables for Measuring Hierarchial Delays

Variable	Explanation and Potential Variables	effect of $d/dx, < 0$ on hierarchial delays
N	number of productive units (workers, plants, division))	-
M	number of decisionmakers (layers of management, number of staff at each hierarchial level)	+
S	span of control (managers per worker)	+
C	difficulty of coordination (spatial separation, number of products, size of market)	-
P	productivity of workforce (skill of labor, management, performance of firm)	+

In short, this market represents a single time period, the relatively short existence of the product in a rapidly changing technology, and the sluggish ability of firms to adjust hierarchies. The theory of hierarchial delays offers little guidance as to functional form of pricing decisions with respect to firm size or other attributes. The dependent variable is the frequency of price adjustment, FPA, a variable that is decreasing in hierarchial delays (e.g. the fewer the hierarchial delays, the higher the FPA). My explanatory variables are all proxies for the variable families listed above. In addition to these, binary variables, identifying particular product attributes are included. If they are correlated with the dependent variable the market definition may be incorrectly defined. The variables, with summary statistics are listed in Table 4-8. The correlation structure of the variables are illustrated in Table 4-9. The expected signs of the parameter estimates appear in Table 4-10.

Table 4-8, Variable Description and Summary Statistics, The Microcomputer Market, 12 Firms in Sample

Variable	Description	Mean	STD Dev	Min Value	Max Value
NEMP	number of employees, FY 94; CIA, S&P, Human Resource Directors (FY dates vary from firm to firm)	63,599.75	772.9	310	219,439
VP	number of vice presidents, FY 94; CIA, Human Resource Directors	4.5	2.1	1	7
DNEMP	% change in employees, FY 93-94 ; CIA, HCG	11.05	14.259	-6.6	41.3
MKTVAL	firm value from financial statements (in \$10,000's) ; S&P, HCG (one value estimated employing a method from Maddalla, 1987)	10,956.13	1,1832.1	376	43,197
94SALES	FY 94 sales from Balance Sheet (in \$10,000's); S&P, HCG, CIA	19,279.25	19,235.3	164	64,052
DSALES	% change in annual sales FY93-94; Human Resource Directors, HCG, CIA	27,375	27.8	-10.2	72.5
ADV	consumer targeted advertising expenditures, FY94; HCG, S&P (in \$1,000's)	18,757	21,679.5	3,030	81,868
BUSMKT	business directed advertising expenditures, FY 94; HCG, S&P (in \$1,000's, one value estimated, method from Maddalla, 1987)	19,383.5	16,431.7	3,352	504,77.8
YPER	income as a percentage of sales, FY93, includes accounting profit, securities and capital sales, sale of intellectual property, this is an accounting measure of a limited form of revenues minus costs, HCG, S&P	5.5108	6.421	0	24.6
TOTALPL	product lines (4-digit SIC-level) produced by these firms AY 93-95 maximum	4.584	2.313	1	9
PL	product lines offered by firms in sample (Microcomputers and components only) AY 93-95	30.25	20.8	4	74

Table 4-8 Con't, Variable Description and Summary Statistics, The Microcomputer Market, 12 Firms in Sample

Variable	Description	Mean	STD Dev	Min Value	Max Value
CONTROL	ratio of VP to NEMP, a measure of senior supervision in the firm	0.000743	0.001266	0.000013	0.00382
APL	average (revenue) product of labor (94SALES/NEMP)	0.5363	0.6457	0.162	2.58
APM	average (revenue) product of management (94SALES/VP)	4719.7	5291.5	54.67	4165.17
ABSALES	Change in sales (DSALES * SALES94)	252,058	232,656	-86086.4	574793
ABSNEMP	Change in employment (DNEMP * NEMP)	-11,381	6949	-14,482	84320
S25	dummy variable, 1 if system has 25MHZ chip, 0 otherwise				
S33	dummy variable, 1 if system has 33MHZ chip, 0 otherwise				
S50	dummy variable, 1 if system has 50MHZ chip, 0 otherwise				
HDA	dummy variable, 1 if system has Hard Drive <120 megabits, 0 otherwise				
HDB	dummy variable, 1 if system has Hard Drive =120 megabits, 0 otherwise				
HDC	dummy variable, 1 if system has Hard Drive >120 megabits, 0 otherwise				

Table 4-9, Correlation Structure of Variables, Microcomputer Market (Product Level Variables)

	DNE MP	MKT VAL	94 SALES	ADV	YPER	BUS MKT	DSALES	TOTAL PL	NEMP	PL	APM	AFL	VP	CON TROL	ABSDN EMP	ABS ALE	FPA
DNEMP	1																
MKTVAL	-.69	1															
94SALES	-.76	.91	1														
ADV	-.58	.87	.80	1													
YPER	.21	.05	-.18	-.00	1												
BUSMKT	-.75	.83	.77	.83	-.13	1											
DSALE	.66	-.45	-.54	-.39	-.06	-.56	1										
TOTALPL	-.70	.73	.82	.68	-.17	.66	-.46	1									
NEMP	-.79	.91	.90	.81	-.18	.85	-.59	.70	1								
PL	-.40	.75	.62	.93	.10	.72	-.20	.43	.63	1							
APM	-.67	.75	.88	.60	-.26	.52	-.49	.58	.86	.42	1						
AFL	.37	-.26	-.07	-.27	.05	-.33	-.13	-.12	-.38	-.23	-.14	1					
VP	.06	.09	.04	.31	-.04	.42	0.03	.35	-.02	.33	-.24	-.03	1				
CONTROL	.45	-.26	-.29	-.27	.31	-.34	-.18	-.36	-.28	-.24	-.27	.55	-.10	1			
ABSNEMP	.60	-.83	-.77	-.85	-.03	-.62	.5	-.72	-.77	-.70	-.51	.15	-.05	.09	1		
ABSALE	.10	.04	.06	-.11	.07	.05	.37	-.07	-.14	.01	.14	.16	.19	-.25	.43	1	
FPA	.28	-.19	-.17	-.14	.11	.23	.92	-.17	-.22	-.11	.37	-.17	.01	.42	.10	-.05	1

Table 4-10, Expected Signs for Parameter Estimates, The Microcomputer Market

Variable	Expected Sign	Category	Description
NEMP	-	N	measure of firm size
MKTVAL	-	N	measure of firm size
BUSMKT	-	N	measure of firm size
ADV	-	N	measure of firm size
YPER	?	N,P	measure of firm size and performance
ABSNEMP	+	N, P	measure of performance of firm
ABSALE	+	N, P	measure of performance of firm
DSALES	+	P	measure of performance of firm
DNEMP	+	P	measure of performance of firm
VP	+	M	measure of decisionmaking difficulty/ # of decisionmakers
TOTALPL	-	C	measure of decision making difficulty
PL	-	C	measure of decision making difficulty
APL	+	P	measure of quality of workforce
APM	+	P	measure of quality of workforce
CONTROL ⁴⁵	+	S	measure of span of control by management
S25	0		measure of heterogeneity of product
S33	0		measure of heterogeneity of product
S50	0		measure of heterogeneity of product
HDA	0		measure of heterogeneity of product
HDB	0		measure of heterogeneity of product
HDC	0		measure of heterogeneity of product

⁴⁵This is the sole variable identified in the literature (Williamson, 1968 and Mehta, 1998).

The independent variables may be placed into four categories. The first are measures of firm size, or productive units, and may be correlated with an unobservable hierarchy, and should all be negatively related to the frequency of price adjustment in the hierarchial delays model. The second are measures of firm performance, and are somewhat less clearly interpreted. The more pronounced the effects of hierarchies, however; the poorer the firm should perform. They should be positively related to the frequency of price adjustment. Next are measures of decisionmaking. The more vice-presidents, the more decisionmakers able to assess decisions. Also the number of product lines in the microcomputer market should be negatively correlated with the dependent variable in the hierarchial delays model. Simply, the higher the number of products, the longer the delays in making pricing decisions. The average products of labor and management measure productivity, and should be positively correlated with the frequency of price adjustment.⁴⁶ The final variable in this category is the ratio of vice-presidents to employees. The higher this ratio, *ceteris paribus*, the more senior supervision in the firm. This should be positive.⁴⁷ Finally, I include heterogeneity measures of the products. If any of these variables are significant, the product definition may not be appropriate.

I shall begin the investigation through a test of a linear functional form and perform diagnostics to support or refute this initial assumption. I will employ initially

⁴⁶Mehta [1998] developed a theoretical model that suggests larger firms would attract more productive workforce. However, that model suggests differences in capital structure that are not likely present in this market.

⁴⁷ It may be negative in two extreme cases; first, if information flows between echelons generate greater delays than decision themselves and second if there are 'extreme' numbers of higher echelon employees (For example, the Mexican Army had more officers than enlisted men at the turn of the century). Neither of conditions are the focus of the hierarchial delays model developed in Chapter 3.

ordinary least squares (OLS) estimates.⁴⁸ The first model was tested using product level data, or frequency of price adjustment (FPA).⁴⁹ OLS was performed as an initial procedure, severe collinearity prevented interpretation of the full model.

A powerful technique for alternate model selection under conditions of high collinearity is Bozdogan's [1997] negentropy, or informational complexity criteria (ICOMP). This technique is performed simply by testing all the potential subsets of the independent variables on the dependent variable. The best model is selected by comparing an information based statistic. The Akaike's Information Criterion mentioned earlier is suggested for ease of computation and its punishment of deviations from parsimony.⁵⁰

$$AIC(k) = n \ln(2\pi) + n \ln \left(\frac{e'e}{n} \right) + n + 2(k+2) \quad (4-1)$$

Bozdogan notes the practical problems in testing a large number of variables. Indeed, testing all the potential subsets of the variables in this model would entail a formidable

⁴⁸The family of limited dependent variable tests are inappropriate to this model for various reasons, chief among these is the doubtful interpretation of marginal effects which are critical to this analysis. Both Logit and Probit tests supported the OLS results but are not reported.

⁴⁹ A test of firm level data (MFPA) was conducted across the twelve firms. As expected severe multicollinearity did not permit useful parameter estimates in this test. Also, there are more explanatory variables than observations using this dependent variables, so only smaller subsets of explanatory variables may be tested.

⁵⁰Bozdogan (1990) identifies Theil's R^2 , the AIC, Hannan and Quinn's modification of AIC (HQ-AIC), Bozdogan's Modification of AIC (AIC-B) as measures of negentropy. Theil's R^2 and the AIC are available in the statistical software used in this dissertation. In every instance, these criterion lead to exact concurrence in model selection. This implies that further tests are not likely to deviate from these low cost techniques. Indeed, Bozdogan uses only these tests in his textbook example, [1990, pp 360-368].

number of regressions.⁵¹ This was possible however, since the collinearity occurred with a small set of regressors. The largest model, not displaying severe collinearity included 7 hierarchical variables, to which I included the market definition variables in my tests. A condition index greater than 30 was my a priori choice, from Kmenta [1986]. A modified Hausmann's test for exogeneity (Maddalla, 1994) strongly suggests that this model is best estimated in a single equation context.⁵² Before discussing these results, additional testing is in order since model specification is of some concern. A Ramsey's RESET or regression specification test was inconclusive due to collinearity.⁵³ An attractive alternative is the Box-Cox transformation (Greene, 1996, pg 479). This was performed but was unfortunately inconclusive due to collinearity (as expected). A semi-log transformation of the dependent variable was attempted which supported the results but did not minimize Akaike's Information Criterion. Hence a transformation of the data was not performed. This strongly suggests model specification is linear.⁵⁴ A White test (Kmenta, 1986, pg 295-6) failed to reject the assumption of homoscedastically distributed

⁵¹Where there are k regressors this leads to $2^k - 1$ models, or 2,097,151 total in these data.

⁵² This is supported by the theoretical model. The modified Hausmann's test is performed by regressing each independent variable on the disturbance term and testing for significance. The regressions performed very poorly in each case (all F statistics ≈ 0.0 , All $ADJ-R^2 \approx 0$.)

⁵³This process suggested including the squared cubed and quadratic values of the estimated dependent variable into a regression with the independent variables (see Maddalla, 1992)

⁵⁴ An alternative test, suggested for instances where there are numerous replicated observations among the independent variables is the Lack-of-Fit test (LOF) (Kmenta, 1986, pg 523-525.) This author recommends this as an attractive alternative to the Rainbow test in instances where replicated observations are present. The Informational criterion suggesting linear specifications makes these classical tests redundant.

errors.⁵⁵ These tests suggest that the model is correctly specified, and that the assumptions of the OLS estimate are not violated. Additional techniques including Generalized and Weighted Least Squares and the Maximum Likelihood method were performed. The results did not vary with these alternate techniques.

Estimation Results and Interpretation

I partitioned the data into six subsets. This was performed by deleting, successively, each of the chip speeds, and then testing on the remainder to evaluate the homogeneity of the good. Not all products possessed each of the characteristics so collinearity was not a problem, the Condition Index of this test was ≈ 17 . The results were similar (within rounding) in each of the partitions of the data (chip speeds and hard drives), and minimal between these two major types. This was critical in determining whether the market definition was correct. If any of the hedonic characteristics of the product were significant, then the results of a varying distribution of product mixes across the firms may skew the results, rendering any interpretation of hierarchical delays suspect. None of the binary variables were significant, a result that strongly supports the market definition. The hierarchical variables selected by the ICOMP technique are the best fitting model and shed some light as to the affects of individual variables to the frequency of price adjustment. Results are shown in Table 4-11.

⁵⁵This is performed by regressing the square of the observed error terms on the dependent variables. The nR^2 is distributed χ^2 , and was not significant at the 0.005 level. It is superior to the Breusch-Pagan test in small sample sizes.

**Table 4-11, OLS Estimates of Microcomputer Market Hierarchical Model,
Data Partitioned by Deleting Individual Products, The Dependent Variable is The
Frequency of Price Adjustment, n=356.**

Variable	Expected Sign	Data partitioned by Speed, (3 regressions displayed, all with identical results)	Data partitioned by Hard Drive size, (3 regressions displayed, all with identical results)
		Parameter Estimate (t-statistic)	Parameter Estimate (t-statistic)
Intercept	?	0.031736*** (3.406)	0.034761*** (2.916)
CONTROL	+	7.427746*** (6.339)	7.775118*** (6.738)
APM	+	0.00000222** (2.027)	0.000002064* (1.914)
APL	+	-0.006611 (-1.261)	-0.008533 (-1.615)
NEMP	-	-0.000000293*** (-2.173)	-0.000000274*** (-2.605)
VP	+	0.000382 (0.201)	0.001961 (0.985)
PL	-	0.000259 (1.575)	0.000182 (1.097)
TOTALPL	-	0.002793 (1.343)	0.002571 (1.299)
HDA	0	0.005139 (0.458)	...
HDB	0	-0.000885 (-0.113)	...
HDC	0	-0.004524 (-0.834)	...
25MHZ	0	...	0.000551 (0.047)
33MHZ	0	...	-0.01216 (-1.045)
50MHZ	0	...	-0.019466 (-1.544)
Adjusted R ²		0.18	0.20
AIC†		-1188.14	-1250.23

*** significant at the .01 level, ** significant at the .05 level, * significant at the .10 level

†included for illustration only. The AIC itself is only valuable for model selection, not evaluation.
Condition Index = 17.

The least satisfying results were the lack of significance of the measures of the number of product lines and brands PL and TOTALPL. They represent the additional decision costs on price setting across a larger number of products. A potential explanation for this is that the variation in these variables is quite low relative to the other variables retained in the model. This suggests that these firms are not experiencing any pricing delays associated with the number of individual products or brands on which to decide. A *decision cost* interpretation is not supported by these results. The lack of significance of the APL was not predicted and clearly implies that this proxy for the average product of labor is not correlated with the frequency of price adjustment. This result does not support a *decision cost* interpretation of price rigidities. Like PL and TOTALPL the variation in APL is also relatively low, so the three variables with the least variation were not significant. This may be the strongest explanation for these results.

The remaining results were very encouraging. NEMP is related to *proposition 1* in chapter 3, and shows the frequency of price adjustment for 356 products in 12 firms was highly significant and negatively correlated with a proxy measure of firm size (NEMP). The magnitude of the parameter estimate suggests that adding an additional 10,000 employees to a firm will extend the duration of fixed prices by 3.3 days for each product. This is difficult to interpret against an unknown optimal span of fixed prices; however, the variation in firm size is $\approx 210,000$ and the smallest firm in the sample changed prices, on average over three times as frequently as the largest firm. This suggests that the informational transmission problem described in Chapter 3 is affecting the frequency of price adjustment. Likewise, the large variation in the average frequency that prices adjust

suggests that there is a meaningful difference in pricing behavior between the firms.

The frequency of price adjustment is significant and positive in the measure of coordination (CONTROL). Though this is a proxy for the theoretical variable of span of control developed by Williamson [1968] and Mehta [1998] it is interesting that this variable is correlated with such an obvious coordinating activity as price setting. The large value of the parameter estimate should be interpreted with caution as it is a proxy for hierarchies; however, it does imply that the smaller the span of control (the fewer employees each vice-president supervises) the more frequently prices change. This finding appears to suggest that the more time a manager spends coordinating, the more frequently prices adjust—presumably towards market clearing. This is a rather strong support for a *decision cost* interpretation of these results.

The measure of managerial productivity (APM) is positive and significantly correlated with the frequency of price adjustment. This would indicate that better performing managers change price more frequently. This is consistent with the other findings and supports a *decision cost* element of hierarchial delays. Again, interpretation of the magnitude of the parameter estimate for a proxy is hazardous, but should assist in building support for the hierarchial delays interpretation of price adjustment.

These findings are important in that no existing model, other than hierarchial delays, explicitly predicts these results. The many models of price stickiness reviewed earlier do not share predictions with this model or can be rejected by evidence presented earlier and should be discounted from consideration. There are many explanations for the behavior of prices in industrial markets. Most of these may be considered inappropriate

due to the competitive nature of the market; however, the potential for a complex pricing game exists in this market. Also, that some firms value long durations of fixed prices as part of a more complex optimization process is possible, if unlikely. These interpretations may limit the appropriateness of a hierarchical delays conclusion of these results, not the significance of sticky prices in this market. I vigorously sought potential alternative explanations. Verification of any alternative explanations suggest additional, and quite attractive conclusions to this research. I am convinced hierarchical delays are the cause of price stickiness in this market.

Conclusion

It has been, until now, axiomatic that firms respond to changes in cost or aggregate demand at the same rate absent extreme market power in the industry. That this occurs in a *workably competitive* market is even more significant in that it challenges the basic assumption of the behavior of markets under this degree of competition. The formulation of optimization functions becomes increasingly problematic in light of these results. What then, does this suggest about the state of existing research? First, this suggests that models of firm behavior take into account the problems of information transmission and the family of hierarchical problems and transactions suggested by Coase, Williamson and others. Second, and quite important in this research are the macroeconomic consequences. These results are critical to the acceptance of New Keynesian Macroeconomic Theory. Until now, New Keynesian models have relied on some degree of market power in the representative firm to generate price stickiness. This

assumption may be correct, but is not *necessary* in the search for price stickiness. Even in workable competition prices are sticky, and do not adjust smoothly and continuously but are ensnared in firm level imperfections which exist in the overwhelming majority of markets. This is heartening support both for the New Keynesian Macroeconomic model as well as the model of hierarchial delays developed in Chapter 3. Further testing is warranted on additional markets.

CHAPTER 5

THE COLORADO WHOLESALE WINE MARKET

"There's no magic equation to pricing but we always ask ourselves two questions: One, what's our competition getting and can we live with that?; and, two since volume is our number one thing, how is our volume driving our business?" Colorado Beverage Analyst, July, 1997

Markets for alcoholic beverages are typically subject to governmental intervention, for three general reasons. First, moral concerns about the effect of alcoholic beverage sales on the community generate regulation or oversight. Second, producers and distributors of alcoholic beverages may seek government intervention as a protector of existing market power. Finally, and perhaps most importantly, the relatively low price elasticity of demand of alcohol makes taxation of the product quite attractive.

Since governments intervene, through regulation and licensing, data on alcoholic beverage sales is often plentiful. Perhaps for that reason, literature on wine price holds a pride of place in New Keynesian literature. Research on relative price variation includes van Hoomisen [1988] and Tommasi [1992]. Work on price rigidities are by Sheshinski and Weiss [1992] and Lach and Tsiddon [1996]. These researchers measured relative price variation, and the timing and magnitude of price changes under conditions of severe inflation. All these data are limited to Israel and Argentina.

This research is related in its quest for answers to the microeconomic foundations of the aggregate economy, but differs in two important respects from the preceding literature. First, my data were collected from periods with mild, or non-existent price level changes. Second, I attempt to explore market structure *and* firm behavior, not just the

latter. Colorado was selected as a potential market due to its relatively large number of distributors, and because its state legislature has taken a leading role in enacting 'sunshine laws' that restrict quasi-governmental organization oversight of industries. My reasons for further restrictions on the data are explained below.

Market Structure

Regulation and Product Differentiation

Wine is sold in Colorado through licensed distributors from vintner to retailer. These distributors are licensed by the state under *Colorado Liquor Code Article 47* which pertains "to malt, vinous, and spirituous liquors containing more than three and two-tenths percent of alcohol by weight"¹ The Liquor Code assesses license fees—all under \$350 per annum—and regulates facility size, location, and required department of staff and patrons. The Liquor code also establishes labeling procedures for alcoholic content (not price)² and establishes a range of container sizes for alcoholic beverages. The wholesaler's license differs from retail licenses in that the two may not be concurrently held and that all importation of alcoholic beverages across state lines requires a wholesale license. Licenses are available for in-state wineries that permit distribution within the state. Alcoholic beverages produced within the state may be directly sold to retailers without a wholesale license. These restrictions led naturally to the selection of a product

¹*Colorado Liquor Code*, Article 47, Title 12, C.R.S. 1973, pg 12.

²The requirement for individual price labels was identified by Levy, D. *et al.* (1996) as the major contributor to menu costs in grocery stores.

to be analyzed in this study. I selected U.S. (non-Colorado) wines sold in the wholesale market throughout a rather short sample period (11 months). This restrictive product definition was made for several reasons both theoretic and empirically driven. Selection of beer or alcohol for the survey runs the risk of encountering upstream market power in those industries. Additionally, since products manufactured within the state may be directly delivered to the retailer, pricing information was limited or non-existent.³ Having narrowed the market to wines, I decided against the inclusion of foreign produced wines as their inclusion might imply additional heterogeneity across firms. This was a reasonable exclusion since a single firm sold specialty wines; while foreign wines were a minor part of the surveyed firms products. My desire was to find a condition where the product choice was homogeneous across firms. Had I limited the choice to a single entirely homogeneous wine this study would be nothing more than a weak replication of earlier studies of price rigidities mentioned in the previous section. The result is that while I have chosen a wide variety of wines, the choice an individual retailer makes when selecting a distributor is homogeneous. That is, as a retailer purchases a variety of wines to stock a retail facility, the choice of comparable brands and varietals are quite homogeneous across firms. The smallest number of wines sold by any firm in the sample is 206, the largest 982. The sample contains individual winery labels, but about half of the products are barrel, box or large (>750ml) bottle wines. Wholesalers focus on a wide variety of wines, none are specialty wine dealers. There are also overlaps of brands between wholesalers, so many

³Especially for Coors®! I did not find evidence of a significantly sized Colorado state wine industry, as expected.

are actually selling the same wines. This suggests the product definition is of a homogenous mix of wines available to the retailer.

The selection of a time period was also critical. The supply of a certain varietal and vintage is obviously fixed *ex post*. Also, different vintages possess different characteristics that affect homogeneity. The choice of time period was undertaken to specifically limit this variation.⁴ Also, a sample period of less than a year eliminated the introduction of additional products that could not be surveyed for a longer period. I also eliminated any products which were not available throughout the sample period. This turned out to be very few products (1-3% in each firm) and were almost exclusively older vintages. Thus the time restriction helped define the market more narrowly. Also, if price rigidities are not evident within a year in a consumer non-durable market the macroeconomic relevance may be in doubt.⁵ The mix of wine products is important because significant variations may distort the empirical tests.⁶ I have chosen some of the most frequently occurring products, and illustrated the proportion of these products that appear in each firm. Except for Chablis, there does not appear to be a significantly different product mix.⁷ Table 5-1 illustrates this product mix.

⁴Of course I still have different goods, but any degree of heterogeneity would increase geometrically if I were to cross time periods in which new vintages were introduced.

⁵This differs from the microcomputer market which is for a consumer durable good.

⁶As will be made obvious later, if there is a correlation between the frequency that prices change and the varietal, then that individual product may have demand or cost shifts unrelated to hierarchical delays. This is problematic only if firms have substantially differing product mixes, which is not evident in these data.

⁷This is strong evidence of homogeneity in product choice as well as workable competition in the market.

Table 5-1, Distribution of Varietals, by Proportion, Colorado Wine Market

Firm	Chenin Blanc	Chablis	Zinfandel	Chardonnay	Merlot	Cabernet Sauvignon
B	.003	.02	.06	.19	.08	.14
C	.002	.01	.05	.15	.07	.17
D	.004	0*,†	.05	.20	.08	.14
E	.003	.02	.07	.18	.09	.12
G	.003	.02	.07	.14	.05	.11
H	.002	.02	.07	.15	.03	.11

*significantly different from the mean at the .10 level

†significantly different from any other firm proportion at the .10 level

Concentration

A quantification of market structure also suggests a relatively strong degree of competition in this market, though this market is more concentrated than the microcomputer market. An HHI greater than 1000 is suggested by *DOJ Merger Guidelines* as identifying the market as appropriate for further analysis when reviewing a merger. These data are for all alcoholic products sold in this market where two or more firms are attempting to merge and are drawn from several sources, primarily the *Wine and Spirits Wholesaler* (WSW) a nationwide trade analysis publication. These data suggest that further analysis of the market, assuming the standards of workable competition are broadly met is appropriate. See Table 5-2.

Table 5-2, Indices of Market Concentration (Colorado Alcohol Beverages)

	Formula	Range	Estimate
Concentration Ratio	$CR4 = \sum P_i$	$0 \leq CR4 \leq 1$	44
Hirschman-Herfindahl Index	$\sum P_i^2, \quad 0 \leq P_i \leq 100$	$0 \leq HHI \leq 10,000$	1250

Evidence of Competition

The supply side of this market is analyzed in the same fashion as in the microcomputer market. The market was selected for its characteristics of *workable competition* (Clarke, 1946). During the sample period (February-December 1996) there were eleven firms with wholesale licenses in Colorado. Three of these sold only one brand of wine (Gallo®) to retailers. These firms sold primarily liquor and beer, with wine as a secondary product. One other firm did not sell wines. One firm sold specialty wines, did not advertise its price and had annual sales less than \$1 million and fewer than five employees. This firm was excluded from the market. The six remaining firms sold relatively large amounts of beer, wine and liquor and offered a wide variety of products. These firms are analyzed in this research.⁸

Market behavior in the Colorado wholesale alcohol market meets the conditions of workable competition. There is relatively rapid change in the product mix. Trade publications are especially attentive to changing trends in products and provide

⁸Two of the firms are owned by a holding company. According to the company presidents, pricing decisions are made at the lower level, which I use in this study.

suggestions for retail establishments in meeting changing demand for products. Retailers have a wide choice of wholesalers, there are no regional restrictions.

At first glance, market conduct analysis provides less support for workable competition existing in this market. The data were collected from a trade publication, the *Colorado Beverage Analyst*. This publication lists wholesalers, sales representatives, their phone numbers, product brands and prices. This monthly publication is sold only to businesses that hold a liquor license in Colorado, its by-laws prevent its sales to other firms or individuals.⁹ This publication however is targeted to the retail audience, not to wholesalers. The aim of the articles (marketing, new brands, new advertising schemes) is directly focused on the retailer. Wholesalers advertise prices and services in this publication. It does not appear that this publication serves the purpose of a 'transparent pricing mechanism' that facilitates tacit collusion. There does not appear to be tacit collusion in this market.¹⁰ There is not widespread price discrimination in the market. Price variations are almost exclusively cost-driven non-linear pricing (quantity discounts). It does not seem to be unusual in this type of market, nor does it seem to differ substantially across firms. I have confirmed the existence of this condition in almost every conversation with trade analysts or business persons. Each tells me that the quantity discounts are based on the listed prices, and change when the listed prices change also. This then would not effect the frequency of price adjustment, which is of interest here.

⁹I was given copies of this publication by helpful businesses.

¹⁰This observation will be empirically examined in the section addressing alternate theories of inflexible pricing.

Market structure analysis reveals this market to be workably competitive. The formal entrance of new firms into the market is limited only by the relatively modest licensing fee. Entry and exit in the market has occurred freely in the past decade, and the potential entrance into the market appears possible by firms already distributing liquor and beer. *This potential entrance is most critical in suggesting excess profits would generate additional competition in this market.*

Evidence of Hierarchies

Prices appear to be set at the higher levels of the firm, not at the sales representative level. Sales representatives have geographic areas of responsibility and report to central offices either directly, or through middle managers. Also, the sales representatives may also make direct deliveries, as well as contracting for future deliveries. I actually attempted to obtain the hierarchial level at which prices are set for each firm, but was met with silence. I suspect this shall always remain a mystery. As in the microcomputer market, this does not seem to be a problem, because a hierarchy necessarily affects more than the simple price setting position. Indeed, Mehta [1998] suggests that delving too deep into the "black box" of the firm may be counterproductive. In this case, that is undoubtably correct, or at least will be assumed to be true for the practical reasons of obtaining the data. I shall have to establish hierarchial delays from proxies or instruments of actual hierarchies.

Price Setting Behavior

Determining the level at which prices are set in this market is even more difficult than in the microcomputer market. Many of the firms are secretive about pricing practices and other aspects of firm behavior. A few important issues do emerge immediately. First, the catalog prices for beverages reflect the prices for a full case (12 or 15 bottles). Prices are usually much higher when stores purchase less than a case of a product. I have been told by several firm members (including one firm president) that quantity discounts change with the catalog prices. Also, sales representatives do not seem to have price setting authority. Second, the mix of goods does not seem to determine the product price (except that samples and advertising material are often given to large purchasers).¹¹ Advertising space, not material seems to be the limiting factor so I don't believe this is too great an issue in the published prices.

Prices appear to be set near the top of the firm hierarchy, and likely respond to data from sales representatives concerning product demand. If firms are homogeneous, then any shift in demand for a product (say a premium merlot) should be felt across the entire industry, and prices should respond accordingly and in near synchronization. Likewise, if there is a cost change from the supplier, it should be transmitted from the firms buying representative to the price setter. This should be more rapid than the demand change if only because it involves only firm internal data, and is made at a more centralized level. Unless the cost changes are very idiosyncratic then this should not lead to

¹¹The effect of this on price setting is unknown. It is illegal for these promotional samples to be distributed in sealed containers to consumers.

staggered price adjustment. The inputs to wine production are quite homogeneous across any particular brand, and should not be subject to idiosyncratic changes to any wide degree. Indeed, many of the firms sell the same wines. So, if firms receive good demand information from firm representatives, and cost data from their buyers, then prices should change at near the same interval, in synchronization. They do not. This phenomenon is at the heart of this investigation.

Colorado Wine Market Data

These data are wholesale price listings collected from the *Colorado Beverage Analyst*, a trade publication from February through December 1996. One month was missing, which reduces the total number of price changes for a minute fraction of the observations (there was only one back-to-back monthly change). This also suggests an increased coordination of price changes, which is still quite small (see the discussion of coordination failures in this chapter). They are of domestic (U.S.) Wines distributed by to retailers and include bottles, boxes, kegs and barrels of various sizes. There are a wide variety of vintners as well as a huge array of varietals (sparkling wines were excluded).¹² These data are listed in Appendix B, and include not only prices, but vintner, varietal and vintage where mentioned in the price list. A sample listing appears in Figure 5-1.

¹²In part due to the strong seasonality in sales of these wines.

	<u>AUG</u>	<u>SEPT</u>	<u>OCT</u>
Inglennook Premium Select, White Zin 1.5L ¹³	\$86	\$86	\$92
Guernoc Beckstoffer Reserve Cabernet, 750ML	\$91.5	\$97	\$97

Figure 5-1, Sample Data Listing, Colorado Wine Market

This list includes virtually all the wines offered for sale in Colorado throughout the sample period with prices listed in the *Colorado Beverage Analyst* (CBA). Three additional firms advertised in the CBA during the sample period but did not include prices. I also excluded varietals that were not offered throughout the entire sample period, and one product where an obvious pricing error had been made by the firm or the CBA staff. These omissions had little actual effect, since less than ten (<2.06%) for any firm were eliminated. While the range in types of wines offered by any firm was between 206 and 982. The result is more than 2,350 different products (varietals or container sizes) observed over 11 months for in excess of 25,850 observations with 1098 price changes. Obviously a price change in the initial observation cannot be inferred. This sample is much larger than any recently published work on price rigidities including those using the Stigler-Kindhal data.

Quality variations in service, as well as advertising and promotions are part of the distributors true product. This is actually less of a problem than most pricing data for two reasons. First, as previously noted, it appears that when prices change, so too does the quantity discount. The wholesalers indicate this is a proportionate change. Also, the

¹³These are all cases of a dozen unless otherwise noted. See Appendix B.

advertisements in the wine markets are usually directed towards actual vintners products (specific wines), not the mix of products offered by the distributor. The large number of vintners products offered by each firm allows for a wide variety of advertising and promotional activities (retailers would always have promotional products available). As previously noted, the marketing sections of the CBA indicate the promotional activities have grown to such a degree that retail space, not promotional products, is the limiting factor. I offer these observations only to answer potential questions concerning these issues. These problems are endemic among price data of all types and are relatively minimal in these data.¹⁴

The dependent variables were collected from many sources, including the CBA, the Colorado Department of Revenue, the *Wine and Spirits Wholesalers of America, Inc.* (WSWA), the *Beverage Marketing Directory* (BMD), an industry analyst, and the individual firms.¹⁵ Two of these firms are part of larger holding company firms, but remain independent, indeed company level data is available for them and prices are set at the level identified in this survey. They seem only to rely on the parent company for bulk purchases from large beer and liquor manufacturers. The private firms were often reticent about sharing data, but surprisingly were much more open about industry information including pricing practices, links to retailers and wholesalers. This was very helpful not only in the market analysis presented earlier but also in determining the level of price

¹⁴Also, expanding the observation time much beyond 11 months would likely have the effect of actually reducing the number of observations since the fixed supply of an annual varietal obviously limits its availability over a long period. The product lifespan for many of these varietals is then even shorter than that for the microcomputers discussed in Chapter 4.

¹⁵I obtained these data through phone calls and a questionnaire

changes. The decision to treat firms differently from their parent companies was subjective, but supported by the weight of the evidence. I would have not have done so unless the evidence were offered by the firm presidents. I will revisit these data shortly in testing the hierarchial delays model. Prior to establishing the existence of hierarchial delays, I will explain the predictions of alternate theories of price rigidities. My intent is to eliminate potential rivals to hierarchial delays in this model, at least where predictions of paramter estimates would be shared. In so doing I shall also illustrate staggered price adjustment in these firms.

Alternate Theories of Price Stickiness

Blinder [1990] identified twelve theories of price stickiness for analysis in his survey. These theories explain various types of price rigidities and are listed in Table 4-2. Blinder's survey results favored a subset of these models. Among those rejected in the survey was hierarchial delays. As I outlined in Chapter 4, I believe this was an error. Alone among these theories, hierarchial delays suggest managerial inefficiency. The alternate theories suggest aspects beyond the immediate control of the manager.

A number of these theories may be eliminated heuristically, others empirically. I shall address them individually. First, contracts, either implicit or nominal require some explanation for their existence within the optimization function of both agents. *Nominal contracts* in this market are not evident. Prices adjust monthly for products in each firm,

and even within the context of quantity discounts do not seem to occur.¹⁶ Indeed the transparency of prices (in *Colorado Beverage Analyst*) suggest against this as a credible explanation. Also, the *implicit contracts* theory is weakened by the industry market structure (a very large number of buyers). Nominal and implicit contracts as an explanation of price rigidities in this market is not a credible theory.

Inventories, a theory that suggests firms allow quantity adjustment to replace price adjustment is not directly verifiable in this model. This is Blinder's theory, and was not strongly supported in his survey. I mentioned in the previous chapter that I accept Blinder's conclusion here. Since there is no direct method of testing given the available data the issue is moot. *Delivery lags*, suggest that firms vary vectors of service hedonics (service, delivery lags, quality) other than price subsequent to a demand shock. This theory is not directly testable but seems unlikely due to the competitive nature of the market. *Judging quality by price* seems improbable on an extensive basis. Certainly the possibility that wines are 'overpriced' to generate a Veblenian type demand is possible, but I feel it represents a minimal influence in this market. The products are just not sufficiently different in price for this to be a likely possibility. *Pricing points* suggest industry, not firm level price rigidities. There are some oddities in the data that warranted special attention, while most firms simply price to the nearest dollar, one firm prices at \$.96, one at \$.36, and one at \$.50. I can find no explanation for this nor did I expect to. These are firm specific characteristics, and many prices change over the traditional pricing

¹⁶Conversations with members of the wholesale firms indicate that quantities are typically recontracted at each sale.

point thresholds.

Procyclical elasticity is suggested for markets experiencing downward shifts in their demand curves. That is not what occurred in the market for wine in Colorado during the sample period. *Cost based pricing with lags* suggest that prices should change with similar frequency for all firms in the market. Thus any rate of price adjustment should be similar across all firms. *Constant marginal cost* suggests that all, or most, firms in the industry are operating in a flat region of their marginal cost curve (similar economies of scale). This implies that firms should be adjusting prices (mostly upwards) at the same rate. Both of these explanations may compound price rigidities due to hierarchial delays, but do not share their predictions with respect to firm size. *Costs of price adjustment* are certainly a factor in explaining inflexible prices in this market. Prices change no more frequently than each month. This is a compounded form of inflexible pricing. Firms in this market share common fixed costs of price adjustment (*Colorado Beverage Analyst*). As I mentioned in the previous chapter, the macro effects of hierarchial delays suggests price inertia regardless of the magnitude of the demand shock. In this market, the average fixed costs of price adjustment are smaller for larger firms (those with more units sold) and should therefore cause more frequent adjustment of prices—*unless they experience hierarchial delays*.

Coordination failures may be eliminated from consideration given the market structure of the industry, however this may also be investigated by viewing the simultaneity of price adjustment of all products in the market. If the firms were coordinating their price changes then the proportions of price changes should be quite

high (Ball and Romer suggest 100%). In this sample less than 25% of goods change price each month. See Table 5-3.

Table 5-3, Staggered Price Adjustment, (Product)

MAR	APR	MAY ¹⁷	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0.227	0.157	0	0.162	0.094	0.099	0.091	0.015	0.119	0.051

As illustrated above, the actual count of price changes by each firm offers an alternate measure of staggered price setting. This element of investigation is an important contribution to the magnitude and duration of observed business cycles as mentioned in Chapter 2. The rationale for synchronized price adjustment heralds back to work by Paul Sweezy, but was best described by modern authors with: "[t]he intuition for this result is simple. A firm minimizes unintended fluctuations in its relative price by changing its price along with as many other firms as possible" (Ball and Romer, 1992, pg. 189). There is no apparent coordination across types of wine, e.g. firms do not change merlot prices in August, cabernet sauvignon in September and chardonnay in October. Evidence of this would suggest coordination of price changes. The sole exception to this is the well noted increase in sales of sparkling wines near the winter holidays (38% of annual sales in this period, WSWA). Monthly price changes are shown in Table 5-4.

¹⁷The absence of data for one month does not permit observations of price changes in that month to be determined. This does not change the frequency only the timing of price changes. Only one product in the remaining sample changed price on two consecutive months, and that was determined to be due to a clerical error, resulting in its removal from the sample. Any potential price changes in May were simply added to June's figure, overstating the already weak evidence of coordination failures.

**Table 5-4, Staggered Price Adjustment
(Total Products, by Individual Firms)**

	B	C	D	E	G	H
MAR	101	75	0	6	68	62
APR	25	29	43	39	35	45
MAY	0	0	0	0	0	0
JUN	1	12	23	12	10	165
JUL	1	24	22	12	25	45
AUG	63	12	1	33	18	8
SEP	4	12	15	38	9	48
OCT	0	1	3	1	14	2
NOV	6	10	2	5	73	68
DEC	5	10	5	16	24	11

Two additional measures of staggered price setting are performed by measuring the autocorrelation between monthly price changes. A significant negative autocorrelation suggests that prices change in synchronization. None were significant in this market suggesting uniform staggering of price adjustment.¹⁸ Also, the standard deviation of the proportion of products that change price is several orders of magnitude smaller than would be suggested by synchronous price adjustment. These statistical tests merely confirm the very obvious staggering of price changes in this industry (see Lach and Tsiddon, 1994). To better illustrate staggered price adjustment across products I partitioned the data separating three types of wine; merlot, cabernet sauvignon and chardonnay. Figure 5-2 illustrates the staggering of price changes across three varietals.

¹⁸The first four autocorrelations were all positive but not significant. Lach and Tsiddon suggest this is strong evidence of staggered price adjustment.

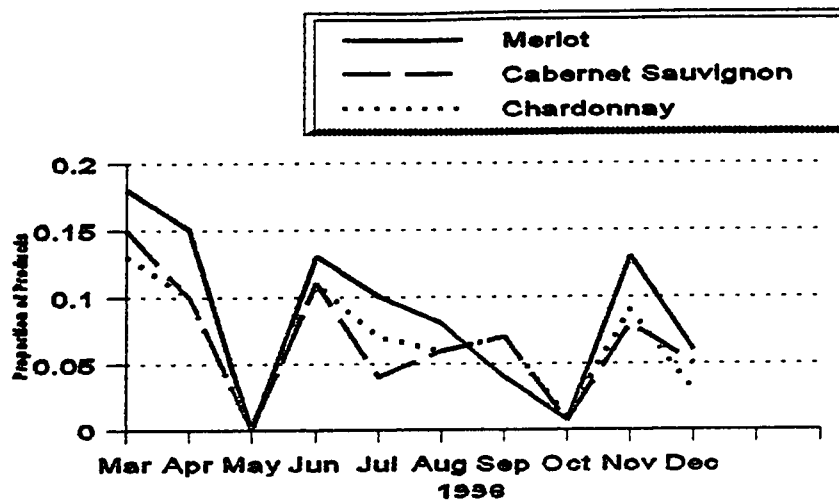


Figure 5-2, Comparison of Price Changes, by Proportion of Products, Individual Varietals (Note: May Data is Missing)

The conclusion here is clear: coordination of price changes across firms is not occurring. Neither menu costs, nor a form of tacit collusion are appropriate explanations for price adjustments in this sample. Indeed, the opposite conclusion is strongly suggested. The small proportion of price adjustments in each period suggest a *decision cost* explanation for pricing behavior in these data (Tommasi, 1992).¹⁹ Analysis of these data suggest that decision costs impose price rigidities (or staggered price setting) on this market. The alternate theories discussed above happen either at industry level, concurrently with decision costs or are absent in this market. In each case, the predictions of the hierarchial delays model—that the frequency of price adjustment is negatively correlated with firm size—are not shared by a relevant competing theory.

¹⁹Decision costs are an important component of hierarchial delays.

Empirical Analysis of Hierarchical Delays in the Colorado Wine Market

The frequency of price adjustment across all the products will ultimately be the dependent variable for testing models of hierarchical delays in this industry, subsequent to adjusting the variable for the total potential number of price adjustments (11). Table 5-5 illustrates these data. Table 5-6 provides the raw variables, a brief description and summary statistics for each.

Table 5-5 Frequency of Price Adjustment, Colorado Wine Market

Count	0	1	2	3	4
Frequency	1273	841	206	36	15
% of Total Price Change	0.53	0.35	0.08	0.02	0.006

The theory of hierarchical delays developed in Chapter 3 suggests families of variables, with predicted signs in empirical tests. I have categorized them into five broad areas from which actual data may be collected. Their explanations are straightforward. The more workers, N , *ceteris paribus*, the slower information transmission as it is transmitted through workers or hierarchies. Even though actual price setting levels may vary, this variable should be closely related to the existence of hierarchies. Also, the number of decisionmakers, M , influences the speed of decisionmaking. The more decisionmakers, the faster decisions are made (though transmission between managers or hierarchical levels may slow). Additionally, the smaller the span of control, S , the faster the decisionmaking (see Mehta, 1998, and Williamson 1968). Since managers both supervise and coordinate, the less time spent on supervision, the more on coordination. Price setting is clearly a coordinating activity. This is the sole variable previously

developed in the literature—though it has not been empirically tested. The difficulty of coordination is the ease with which managers may decide appropriately. For example, the larger the number of products on which to decide, or the farther the spatial separation of markets, the slower decisionmaking. Likewise, if communication devices are proliferated in the firm, this eases the speed of decision making or the time spent supervising. Finally, the more productive the workforce, the faster the decisionmaking. This should be most true for decisionmakers. These variables represent potential areas for testing. Of course, since hierarchies are unmeasurable, latent variables I must rely on proxies. See Table 5-6. The correlation structure of the variables is illustrated in Table 5-7. My explanatory variables are all proxies for the variable families and appear in Table 5-8.

Table 5-6, Potential Variables for Measuring Hierarchical Delays

Variable	Explanation and Potential Variables	effect of $d/dx < 0$ on hierarchical delays
N	number of productive units (workers, plants, division)	-
M	number of decisionmakers (layers of management, number of staff at each hierarchical level)	+
S	span of control (managers per worker)	+
C	difficulty of coordination (spatial separation, number of products, size of market)	-
P	productivity of workforce (skill of labor, management, performance of firm)	+

Table 5-7, Correlation Structure, Colorado Wine Market

	NEMP	VEH	SALES	TOTAL PL	SALES REP	PHONE	PL	SALN EMP	PHON EMP	SALE PHON	APL
NEMP	1										
VEH	0.32	1									
SALES	0.88	0.65	1								
TOTALPL	0.38	0.37	0.54	1							
SALESREP	0.16	0.36	0.44	0.06	1						
PHONE	0.80	-0.24	0.48	0.09	-0.18	1					
PL	0.86	-0.15	0.59	0.38	-0.07	0.9	1				
SALNEMP	-0.80	-0.73	-0.84	-0.52	-0.10	-0.34	-0.51	1			
PHONEMP	-0.66	-0.79	-0.81	-0.54	-0.35	-0.11	-0.37	-0.94	1		
SALEPHON	-0.26	0.43	0.13	0.18	0.83	-0.66	-0.47	0.05	-0.27	1	
APL	0.15	0.83	0.57	0.57	0.44	-0.30	-0.24	-0.42	-0.49	0.55	
FPA	-0.20	-0.10	-0.22	-0.11	-0.12	-0.14	-0.13	0.19	0.21	-0.00	-0.06

Table 5-8, Variable Description and Summary Statistics, The Colorado Wine Market

Variable	Description	Mean	Std Dev	Min Value	Max Value
NEMP	the number of employees, WSW, Human Resource	76.5	56.58	19	188
VEH	the number of delivery vehicles of all types, WSW	33.5	19.13	9	55
SALES	FY 94 sales, in \$million, WSW, questionnaire	51.5	35.77	5	100
TOTALPL	total number of product lines sold, WSW	15.83	4.05	11	22
SALESREP	number of sales representatives, CBA	50.17	13.02	31	69
PHONE	number of listed telephone numbers, CBA	62.5	21.76	45	109
PL	number of wine products in sample, CBA	391.33	271.16	206	982
SALNEMP	ratio of sales representatives to total employees, CBA, WSW, Human Resource	1.06	0.70	0.23	2.32
PHONEMP	ratio of listed telephones to employees, CBA, WSW, Human Resources	1.31	1.01	0.58	3.37
SALEPHON	ratio of listed telephones to sales representatives, CBA	0.89	0.36	0.41	1.53
APL	average product of labor, WSW, CBA, Human resources	0.64	0.28	0.17	1.07
CHENIN	binary variable, 1 if product is a Chenin Blanc, 0 otherwise (all wines pure varietals)				
CHABLIS	binary variable, 1 if product is a Chablis, 0 otherwise				
ZINFAN	binary variable, 1 if product is a Zinfandel (white or blush), 0 otherwise				
CHARD	binary variable, 1 if product is a Chardonnay, 0 otherwise				
MERLOT	binary variable, 1 if product is a Merlot, 0 otherwise				
CABSAUV	binary variable, 1 if product is a Cabernet Sauvignon, 0 otherwise				
BIN750	binary variable, 1 if product is sold in 750ml bottle, 0 otherwise				

The dependent variable for testing will be the frequency of price adjustment for the product (FPA).²⁰ The measures of firm size; NEMP, VEH, SALES, PHONE, SALESREP all measure 'bigness' of the firm, and are proxies for hierarchies. The greater the frequency of price adjustment, as I described in Chapter 3, the lower the hierarchical delays, hence these variables should be negatively correlated with the dependent variable (FPA).

TOTALPL and PL measure increased decision costs, due to a large general product mix (brands) or the number of individual products and should be negatively correlated with FPA. SALNEMP is a measure of the horizontal hierarchy of firms. This should suggest more time spent by managers supervising, and a greater width in hierarchies, and should be negatively correlated with FPA.

PHONEMP and SALEPHON measure the 'ease' of communication. The higher the proportion of telephones, the easier communications and the less time managers will likely have to spend supervising.²¹ These should be positively correlated with the dependent variable, FPA. APL is a measure of productivity of workers, and should be positively related to FPA because it infers less time spent supervising by managers due to a more productive work force in a firm. The individual variables, explanations and expected signs are illustrated in Table 5-9.

²⁰This will be transformed so that the raw value will be divided by the total possible, bounding the variable $\in [0,1]$.

²¹The more time spent supervising, the less spent coordinating was a central finding of both Mehta [1998] and Williamson [1967].

Table 5-9, Expected Signs for Parameter Estimates, Colorado Wine Market

	Expected Sign	Category	Description
NEMP	-	N	measure of firm size
VEH	-	N	measure of firm size
SALES	-	N	measure of firm size
PHONE	-	N	measure of firm size
SALESREP	-	N	measure of firm size
SALNEMP	-	N	measure of horizontal hierarchy
TOTALPL	-	C	measure of decision making difficulty
PL	-	C	measure of decision making difficulty
PHONEMP	+	S	measure of span of control of communications (inverse measure)
SALEPHON	+	C	measure of span of control of communications
APL	+	P	measure of productivity of workforce
CHENIN	0		measure of homogeneity of product
CHABLIS	0		measure of homogeneity of product
ZINFAN	0		measure of homogeneity of product
CHARD	0		measure of homogeneity of product
MERLOT	0		measure of homogeneity of product
CABSAUV	0		measure of homogeneity of product
BIN750	0		measure of homogeneity of product

The remaining variables are all dummy variables that measure homogeneity of the product. If they are not correlated with the dependent variable then homogeneity of the products themselves are a strongly supportable assumption; there is no difference in demand or cost shocks. However, as I suggested earlier it is the product mix offered by the distributor, not the wines themselves I feel are homogeneous. Table 5-1 illustrated that, except for Chablis, the product mixes of the selected varietals were not significantly

different across firms. If any of these binary variables are significant, then additional testing, of subsets of the data may be appropriate.

The dependent variable, the Frequency of Price Adjustment (FPA) was tested using ordinary least squares (OLS).²² This test was inconclusive due to severe multicollinearity. An informational complexity criteria (ICOMP) based technique of model selection under severe collinearity, negentropy, was employed (Bozdogan, 1997). This technique is performed by simply testing the dependent variable on every possible subset of the independent variables and select the best fitting model through an information based criteria evaluated at the first set of regressors not displaying a high degree of multicollinearity.²³ Seventeen model classes were possible, each with 18 or less independent variables (none with zero RHS variables). The lowest Akaike Information Criterion (AIC) in each category dictated the choice of that model.

Of the model tested, the biggest model, not displaying extreme multicollinearity had four independent variables related to hierarchies. To this I added the homogeneity variables. The homogeneity variables were not used in the model selection process because they add nothing to the hierarchial description but are critical to determining the homogeneity of the product, so must remain in the regression.

The results of the OLS estimation of each model is a convenient starting point.

²²Initial testing of the model focused on the Mean Frequency of Price Adjustment (MFPA) as the firm level measure of price inflexibility. This test was inconclusive due to an unusually high degree of multicollinearity, as expected. Also, the small sample size (six firms) did not make this test particularly powerful.

²³I selected a Condition Index (CI) of 30 as an *a priori* indicator of high collinearity. This is suggested by Kmenta, 1987 and Kennedy, 1994. I would allow a higher CI if the independent variables were significant in accordance with classical hypothesis testing. This choice became redundant.

The potential measurement errors suggest heteroscedasticity so some additional diagnostics were appropriate.²⁴ A Ramsey's heteroscedasticity test pointed to an absence of that violation of the classical linear modeling assumption.²⁵ However, the more powerful White test rejected the assumption of homoscedastically distributed errors.²⁶ A good method of correcting the inefficient standard errors produced under heteroscedasticity is White's 'Heteroscedasticity-Consistent Covariance Matrix Estimator'. The White test found that the squared error term was negatively correlated with the dependent variables so the corrected standard errors should be smaller than those generated under OLS. This was the case, and implies that the inefficiencies generated by heteroscedasticity overestimated the true error variance.²⁷ The parameter estimates are still unbiased (See White, 1980, Greene, 1996 and Maddalla, 1992). A Ramsey's RESET rejected model misspecification.²⁸ Alternate tests of functional form failed to produce a better fitting model. These tests imply a correctly specified model, see Table 5-10.

²⁴As with Chapter 4, the family of limited dependent variable tests were inappropriate here.

²⁵This is performed by regressing the dependent variable on a combination of the square, cube and quadratic transformation of the disturbance term.(Maddalla, 1994)

²⁶This was performed by regressing the squared error term on the independent variables. The test statistic nR^2 is distributed χ^2 , and was highly significant.

²⁷The corrected, or 'White-Washed' standard errors for each variable are: NEMP(0.000056), SALESREP(0.000328), APL(0.015058) and PHONEMP(0.00475). Each are significant to the .01 level. (See White, 1980).

²⁸In this case the dependent variable was regressed with square, cube and quadratic transformations of the predicted dependent variable included as independent variables (with the remaining independent variables, in each model subset) (Maddalla, 1994).

**Table 5-10, OLS Estimates of the Full Model, Colorado Wine Market,
OLS Standard Errors Used to Compute t-Statistic, Frequency of Price
Adjustment is Dependent Variable, n=2371**

	Expected Sign	Largest hierarchial model	Full Model
Intercept	?	0.276206*** (8.899)	0.251255*** (7.887)
NEMP	-	-0.000410*** (-4.830)	-0.000382*** (-4.491)
SALESREP	-	-0.002721*** (-6.506)	-0.002745*** (-6.697)
APL	+	0.049433*** (2.623)	0.047125** (2.503)
PHONEMP	+	0.022585*** (2.938)	0.025211*** (3.280)
CHENIN	0	...	0.001931 (0.055)
CHABLIS	0	...	-0.008239 (-0.275)
ZINFAN	0	...	0.029968* (1.952)
CHARD	0	...	0.032317*** (3.093)
MERLOT	0	...	0.081131*** (4.982)
CABSAUV	0	...	0.029857** (2.579)
BIN750	0	...	0.007826 (0.933)
ADJ-R ²		0.21	0.08
AKAIKE's		-1286.39†	-1309.5†

***significant to the .01 level using Student's t-test,

**significant to the .05 level using Student's t-test,

*significant to the .10 level using Student's t-test.

†For use in model selection only.

Estimation Results and Interpretation

The hierarchical specific variables all possessed the expected sign, and were highly significant. Measures of firm size, NEMP and SALESREP were negatively correlated with the frequency of price adjustment, while the measure of productivity and the phone-to-employee ratio were both positively correlated with the FPA. These results are surprisingly strong even when employing the informational complexity criteria technique that produces the 'best-fitting' model.²⁹ The significance of some of the binary variables present some problems I will address later.

That both measures of firm size were negative and significant implies that firm size slows the frequency of price adjustment. However, the small variation in firm size in this sample, and the small parameter estimate make further inference of these variables problematic. The size of these parameter estimates suggest that increasing the number of employees by 100 persons slows the frequency of price adjustment for each product by ≈ 14 days, while adding 100 sales representatives slows price adjustment by almost 3 months. The addition of 100 employees would more than double the size of all but the largest firms, while 100 additional sales representatives would more than double the biggest firm. Hierarchical delays are a latent variable, and therefore difficult to exhumate from the data, but the contribution of additional employees (or sales reps) to decisionmaking speed is safe to conclude from these results.

Also, both APL the average product of labor, and PHONEMP the ratio of phones

²⁹Note, that in the previous market the CONTROL variable was significant. Several attempts to proxy this variable, all poor, resulted in it being rejected as part of the best fitting model. This should partially ease any remaining concerns of omitted variable bias not already alleviated by the ICOMP technique.

to employees are both positive and significant as predicted. The same caveats apply here, but as measures of speed of information flow and workforce quality these are quite reasonable proxies. These results strongly support the acceptance of hierarchical delays as contributing to the frequency of price adjustment in this market.

As previously mentioned, the significance of the binary variables is a concern, for if individual products are subject to differing demand or costs shocks *and* individual firms do not share similar product mixes, then this model may not correctly interpret the results as pointing to the existence of hierarchical delays. Recall Table 5-1 illustrates, that, except for chablis, there is no statistically different product mix in any of these firms (I attached binaries to about half the total products, including the 'big three'). In testing, the size of the container (BIN750), and whether or not the product was a chablis or chenin blanc were not correlated with the frequency of price adjustment, so are not tested. In order to establish that the individual products respond in a way that supports the hierarchical delays model, I must test subsets of the data. First, I will do this by testing the model on the data, excluding each product individually, then on just the individual varietals. The results appear in table 5-11 and 5-12.

**Table 5-11, OLS Estimates of Partitioned Data, Excluding Varietals, Colorado Wine Market,
Dependent Variable is Frequency of Price Adjustment, t-Statistic Computed From OLS Estimates**

	Expected Sign	no chenin blanc	no chablis	no zinfandel	no chardonnay	no merlot	no cabernet sauvignon
Intercept	?	0.273726*** (8.771)	0.265*** (8.477)	0.270863*** (8.490)	0.277059*** (8.252)	0.277197*** (8.665)	0.0281098*** (8.272)
NEMP	-	-0.000409*** (-4.778)	-0.000376*** (-4.387)	-0.000431*** (-4.919)	-0.000464*** (-5.037)	-0.000421*** (-4.819)	-0.000432*** (-4.679)
SALESR EP	-	-0.002705*** (-6.445)	-0.002584*** (-6.156)	-0.002481*** (-5.802)	-0.002742*** (-6.073)	-0.002821*** (-6.489)	-0.002754*** (-5.986)
APL	+	0.051155*** (2.698)	0.047572** (2.490)	0.040062* (2.061)	0.055161*** (2.670)	0.049147*** (2.541)	0.044702** (2.189)
PHONE MP	+	0.023230*** (2.993)	0.024568*** (3.171)	0.022942*** (2.881)	0.021858*** (2.642)	0.023600*** (3.016)	0.022352*** (2.677)
n		2324	2208	2204	1955	2221	2050
ADJ-R ²		0.07	0.06	0.07	0.07	0.07	0.07
F-		42.251	40.283	41.082	40.090	43.559	38.356
Statistic							

***significant to the .01 level using Student's t-test,

**significant to the .05 level using Student's t-test,

*significant to the .10 level using Student's t-test.

Table 5-12, OLS Estimates of Partitioned Data, Single Varietals, Colorado Wine Market, Dependent Variable is Frequency of Price Adjustment, t-Statistic Computed From OLS estimates, Non-Significant Models (using F-statistic at .10 level) are Omitted

	Expected Sign	chablis	zinfandel	chardonnay	cabernet sauvignon
Intercept	?	1.454590*** (6.520)	0.420957*** (3.136)	0.266394*** (3.291)	0.238496*** (3.104)
NEMP	-	-0.003011*** (-5.788)	-0.000281 (-0.803)	-0.000106 (-0.483)	-0.000246 (-1.116)
SALESREP	-	-0.020977*** (-5.620)	-0.007311*** (-3.784)	-0.002650* (-2.418)	-0.002432** (-2.411)
APL	+	0.278824** (2.615)	0.209797*** (2.752)	0.024526 (0.529)	0.079614 (1.618)
PHONENMP	+	-0.134924*** (-2.790)	0.010237 (0.348)	0.027732 (1.353)	0.024917 (1.262)
n		35	155	404	309
ADJ-R ²		0.57	.07	0.03	0.04
F-Statistic		14.325	4.42	4.447	4.288

***significant to the .01 level using Student's t-test.

**significant to the .05 level using Student's t-test.

*significant to the .10 level using Student's t-test.

Clearly, the results from Table 5-11, the data eliminating each of the varietals in turn strongly supports the hierarchical delays model. The results illustrated in Table 5-12 also generally support the hierarchical delays model, with a few exceptions. The parameter estimate for PHONEMP, when regressed only on the Chablis wines is significant and incorrectly signed. The strongest potential explanation for this is the small sample size. Also, several of the variables dropped from significance. Otherwise, the results consistently support the hierarchical delays model.

A Comparison of Markets and Conclusions

The Microcomputer industry and the Colorado Wholesale Wine industry share many of the same characteristics of workable competition, and possess goods that are nearly homogenous across firms. The former is a consumer durable, the latter a consumer non-durable, and both samples were drawn at different time periods. Both industries are wholesalers to retail outlets. Also, both industries have widely varying firm sizes. Prices change monthly, and firms share a common fixed cost of price adjustment. There are strong informational elements to both markets, and in both markets, prices tend to be set at the upper echelons of the firms.

Additionally, some powerful comparisons can be made in terms of this research. First, both industries have firms that change products with widely varying frequency. In both markets, the products that change price the most often do so on average every 3 months. The slowest, once, or not at all in the sample period. Also, the mean frequency that prices change, across firms is about three times faster in the smallest than in the

largest firms. These results are stunning, but on closer look there is more. For both industries the frequency that individual firms adjust prices for individual goods is strongly negatively correlated with the size of the firm (NEMP in both industries). Also, the FPA is positively correlated with measures of firm performance measures (APM and APL respectively). This strongly contradicts the pricing behavior of the traditional perfectly competitive market, and heretofore would not be expected in a workably competitive firm. Differences exist, and should be expected. First, the same variables are not shared in both industries (one being almost exclusively composed of private firms).³⁰

Second, the magnitude of the parameter estimates vary widely. This is quite appropriate, since different production processes and different demand or cost shifts should cause variation in the frequency that prices adjust. I would be surprised if parameter estimates did correspond across industries. They should be of like sign however and have economic significance, as shown. However, since the opportunity costs of mis-pricing inevitably vary across these industries, I would expect that the more costly the hierarchial delay, the less it affects pricing. Simply, firms would take steps to ameliorate them if they threatened the survival of the firm. Clearly, the opportunity cost of mis-pricing are much higher in the consumer durable than the non-durable as occurs in this study. This research should then lead to several conclusions.

³⁰This raises the specter of misspecification, a problem best handled by the ICOMP technique.

CHAPTER 6

CONCLUSION

Though the macroeconomy is more than the sum of its parts, analysis of individual and firm behavior is integral to the development of any model of the macroeconomy. The majority of work in macroeconomics relies on theoretical price setting behavior of representative firms. That is an appropriate beginning, and one which has seen a prodigious amount of research. While there should be little disagreement as to the price setting behavior of the traditional market models, there has been little empirical verification of price setting behavior in firms that are chosen as representative of the microeconomy in macro models. This dissertation provides an important key to the selection of an appropriate model assumption, based on empirical evidence, for construction of a macroeconomic model.

The selection of the representative firm has been contentious. New Classical modelers suggest that perfect competition (or nearly so) is the appropriate representative firm. New Keynesians rely on varying degrees of imperfect competition. This selection of the appropriate representative model of the firm is important for its result of sticky prices. So identifying the competitive levels of the aggregate economy is tangential to finding widespread evidence of sticky prices. As I related in the introduction, most empirical researchers (Carlton, 1986; Cecchetti, 1986; Kashyap, 1992; Dahlby, 1994) have sought evidence of sticky prices in the places it is most likely to be found, in very uncompetitive industries. This does little to address the appropriate choice of a representative firm in the

macroeconomy. In selecting a representative firm for the macroeconomy, it seems simply, a firm that best represents aggregate behavior should be sought. This must be an empirical process. We are now at the point of inquiry where work on the fringes of the competitive spectrum, or labor in assigning this firm a traditional model name, is misspent. A more productive route is to seek sticky prices, in the most competitive firms, and search up the competitive spectrum until they are discovered.

Fifty years of research by Industrial Organization economists has established a clear negative correlation between firm competitiveness and price rigidities (See discussion by Martin [1994, pg. 2-7]). So, if we find rigid prices early and often along this route, very near our starting point of very competitive industries, we can safely conclude that the majority of remaining markets possess sticky prices. If we must complete the journey, failing to find rigidities until we arrive at Mankiw's monopolist, we cannot assume sticky prices are widespread. This process should guide the selection of a representative firm. That has been the direction of this dissertation.

I have found sticky prices in two markets. One market, the Colorado wholesale wine market is for consumer non-durable goods. The other, the microcomputer market is a consumer durable good. These may be representative of a significant minority of products in the economy. The existence of undeniably sticky prices is alone significant, but if prices are sticky in very competitive (workably competitive) markets then the assumption that markets clear continuously is inappropriate. Thus, few firms behave "as if" they are competitive in the real sense of having flexible prices. This dissertation illustrates sticky prices in two markets that are workably competitive. These results alone

are a strong contribution to New Keynesian Macroeconomic Theory, but there is more.

These prices are sticky because of hierarchial delays, a previously unexplored theory. This dissertation answers the call of Ronald Coase's 1991 Nobel Laureate lecture in engaging in data intensive firm level investigation. This dissertation uses pricing data from private and public firms, and in that it explores price rigidities at firm level, uses more, and richer data than any previously published work on price rigidities.¹ This research suggests price rigidities exist at the firm level and are due to hierarchial delays.

However, additional research is warranted. First, this research should be replicated in a number of additional studies in firms at all levels of the competition spectrum, and including the possibility that these rigidities are real as well as nominal. Second, the existence of price rigidities across the vertical exchange of goods needs to be developed. If New Classical economists point to commodity markets as examples of perfect competition, they miss the point that downstream these markets may have rigid prices. Price rigidities, anywhere in the stream of goods, from commodity to finished product, have macroeconomic significance. Third, an extensive panel data set that measures the adjustment firms make to hierarchies should be compiled. This is extremely costly, and would likely require several years to complete. The problem is complicated by the need to strategically select markets where there is a high degree of homogeneity, a relatively brief product life, and easily definable competition conditions. This would permit a deeper exploration of how firms adjust to hierarchies, and how competition

¹There are more individual products in these two markets than in the combined work of Carlton [1986], Cecchetti [1986], van Hoomisen [1988], Kashyap [1992], Sheshinski and Weiss [1992], Tommasi [1992], Dahlby [1994], and Lach and Tsiddon [1996].

environments change due to the changes in firm hierarchial structures.

Also, the contribution of changing incentive schemes and management information systems should be undertaken with respect to the frequency that prices adjust. Likewise, the additive nature of price rigidities should be explored. In both of these markets I have used data for firms that change prices no more frequently than monthly. This implies that menu costs may be a strong contributor to sticky prices, along with hierarchial delays. It is reasonable to assume that a multitude of causes for price stickiness occur simultaneously within any market. Here, I was fortunate to be able to isolate hierarchial delays as a cause of price rigidities.

These are all important and interesting areas of research. Also, the need for firm level investigation of information impactedness, and its effect on output, pricing and quality decisions should be expanded. To do so, economists should devote some time to studying management, sociology and industrial psychology literature, and apply our superior analytical techniques to answering the many interesting questions they ask.

Finally, a more clearly elucidated description of information transmission, than is currently available, would be helpful for economists attempting to model decisionmaking.

These extensions represent a fraction of the potential research in this area. However, this dissertation has contributed significantly to my understanding of firm behavior, the effect of hierarchial delays on pricing information, and on its intended target, the rejection of continuous market clearing as an appropriate model assumption in macroeconomic theory. Finally, then, I conclude with a strong suggestion that New Keynesian theory is the appropriate choice for modeling the macroeconomy.

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APPENDICES

APPENDIX A
COMPUTER MARKET DATA

The sources for these data are mentioned in the text and bibliography and were compiled in 1997. Specific questions concerning these data may be obtained from the author. I can be traced quite simply by contacting the *American Economic Association*, the *Department of Economics, University of Tennessee*, the *Center for Business and Economic Research at the University of Tennessee*, or the *Alumni Office, Virginia Military Institute*. I recommend contacting me prior to attempting to test these data, since I will very shortly be willing to share them on an electronic format. What follows are the raw variables and price change data from which I generated the frequency of price adjustment data tested in the text of this dissertation. The data are the raw observations only, all other variables may be calculated from these data. Details concerning the data including the scale, are mentioned in the text.

The firms are listed anonymously by letter. This was done randomly, the letters corresponding to the notebook letter in the spreadsheet program I used to record and process the data. Since the data is quasi-proprietary, I cannot list the firms with the data. I will share the data with any interested scholar.

Raw Data, The Microcomputer Market

	B	E	F	H	M	O	P	U	V	X	Y	I
NEMP	8800	784	219439	310	6977	67672	58900	147910	14872	82800	98400	56333
VP	2	3	5	1	5	2	6	2	7	7	6	7
DNEMP	11	12.2	-6.6	41.3	33.1	7.9	4.9	5.7	25.6	-0.8	1.8	-3.5
MKTVAL	1800	4496.5	43197	376	473	14133	7824	11740	10311	4731	25452	6940
94SALES	3248	164	64052	800	2367	19333	46695	35069	10866	13421	24991	10313
DSALES	72.5	-10.2	2.1	63.6	67.6	17.5	12	14.7	51.1	-6.4	23	21
ADV	3370.8	3266.8	81868.7	3763.8	9750.2	3030.6	11872.9	13273	37641.8	31895.8	13030	12324.9
BUSMKT	16808	1636.6	504778	3136.1	3352	12655.1	15132.8	26851.5	26563.4	39318	41322.4	10469.7
YPER	3.5	24.6	4.6	7.93	2.3	1.6	.3	.2	8	0	6.4	6.7
TOTALPL	1	4	8	1	4	5	8	3	3	5	5	9
PL	30	15	74	21	54	6	19	21	59	37	23	4

Firm B	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
486SX no HD, 4MB ISA			838	838	838	838	838	838	838	838
486SX120MB 4MBhd			1128	1128	1128	1128	1128	1128	1128	1128
486SX-25 no HD 4MB IS				735	735	735	735	735	735	735
486SX, 120 4IS			735	735	735	735	735	735	735	735
486SX-25 no HD 4 MB ISA							716	716	716	716
486SX, 170, 4, IS							1015	1015	1015	1015
486SX, 240 MB, 4 MB								1040	1101.5	1101.5
486SX170,4MB								966	966	1003.5
486SX, 240MB,4MB								1141	1141	1171.25
486SX33,170,4 IS								1230	1230	1263.5
486SX-25,120 MB-H										1773.5
486SX25,120M B										2288.5
486sx,noHD, 4MB										713.5
25,170										
33, 170										
25, no HD, 4MB										
25, 170, 4MB										
25, 240, 4MB										
33, 170, 4 MB										
33, 210, 4 MB										
25,210, 4MB										
33, 210, 4 MB										
33, 210										
33, 210										
33, 210										
25, 210, 4MB										
33, 210, 4 MB										
50, 340, 4MB										
2-50, no HD										
50, 270										

Firm B	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
486SX no HD, 4MBISA	838	838	838	838	838	838	838	838	838	838
486SX120MB 4MBhd	1128	1128	1128	1128	1128	1128	1128	1128	1128	1128
486SX-25 no HD 4MB IS	735	735	735	735	735	735	735	735	735	735
486SX, 120 4MB	735	735	735	735	735	735	735	735	735	735
486SX-25 no HD 4 MB ISA	716	716	716	716	716	716	716	716	716	716
486SX, 170, 4, IS	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015
486SX, 240 MB, 4 MB	1088	1088	1072	1048	1048	1048	1048	1048	1048	1048
486SX170,4MB	910	910	1028.5	981.25	981.25	982.25	982.25	982.25	982.25	982.25
486SX, 240MB,4MB	1171.25	1171.25	151.75	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5
486SX33,170,4 IS	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5
486SX-25,120 MB-H	1814.25	1814.25	1659.5	1445.5	1445.5	1447	1447	1447	1447	1447
486SX25,120M B	2341.25	2341.25	2341.25	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5
486sx,noHD, 4MB	713.5	713.5	713.5	713.5	713.5	713.5	713.5	713.5	713.5	713.5
25,170	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5
33, 170	1760.75	1760.75	1322.75	1336	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75
25, no HD, 4MB			769	776.5	788.75	788.75	788.75	788.75	788.75	777
25, 170, 4MB			921.5	930.75	921.5	921.5	921.5	921.5	921.5	921.5
25, 240, 4MB			956.5	966	968	968	968	968	968	968
33, 170, 4 MB			1393.5	1469.75	1469.75	1469.75	1469.75	1469.75	1469.75	1469.75
33, 210, 4 MB					1021.75	1021.75	1021.75	1021.75	1021.75	997
25,210, 4MB					1052.25	1052.25	1052.25	1052.25	1052.25	1052.25
33, 210, 4 MB					1094	1094	1094	1094	1094	1094
33, 210					1778.75	1778.75	1778.75	1778.75	1778.75	1698.75
33, 210					2371.75	2251	2251	2251	2251	1968
33, 210					1270	1277.5	1277.5	1277.5	1277.5	1230
25, 210, 4MB										970
33, 210, 4 MB										1564
50, 340, 4MB										1320
2-50, no HD										1143
50, 270										

Firm B	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
486SX no HD, 4MBISA	838	838	838	838	838	838	838	838	838	838
486SX120MB 4MBnd	1128	1128	1128	1128	1128	1128	1128	1128	1128	1128
486SX-25 no HD 4MB IS	735	735	735	735	735	735	735	735	735	735
486SX, 120 4IS	735	735	735	735	735	735	735	735	735	735
486SX-25 no HD 4 MB ISA	716	716	716	716	716	716	716	716	716	716
486SX, 170, 4, IS	1015	1015	1015	1015	1015	1015	1015	1015	1015	1015
486SX, 240 MB, 4 MB	1048	1048	1048	1048	1048	1048	1048	1048	1048	1048
486SX170,4MB	982.25	982.25	982.25	982.25	982.25	982.25	982.25	982.25	982.25	982.25
486SX, 240MB,4MB	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5
486SX33,170,4 IS	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5
486SX-25,120 MB-H	1447	1447	1447	1447	1447	1447	1447	1447	1447	1447
486SX25,120M B	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5
486sx,noHD, 4MB	713.5	713.5	713.5	713.5	713.5	713.5	713.5	713.5	713.5	713.5
25,170	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5
33, 170	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75
25, no HD, 4MB	790	790	790	781	781	781	781	781	781	781
25, 170, 4MB	921.5	921.5	921.5	921.5	921.5	921.5	921.5	921.5	921.5	921.5
25, 240, 4MB	988	988	988	988	988	988	988	988	988	988
33, 170, 4 MB	1489.75	1489.75	1489.75	1489.75	1489.75	1489.75	1489.75	1489.75	1489.75	1489.75
33, 210, 4 MB	997	997	997	975	975	975	975	975	975	975
25,210, 4MB	1052.25	1052.25	1052.25	1052.25	1052.25	1052.25	1052.25	1052.25	1052.25	1052.25
33, 210, 4 MB	1094	1094	1094	1094	1094	1094	1094	1094	1094	1094
33, 210	1698.75	1698.75	1698.75	1698.75	1698.75	1698.75	1698.75	1698.75	1698.75	1698.75
33, 210	1988	1988	1988	1945	1945	1782	1782	1782	1782	1782
33, 210	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230
25, 210, 4MB	970	970	970	980	980	980	980	980	980	980
33, 210, 4 MB	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
50, 340, 4MB	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
2-80, no HD	1143	1143	1143	1143	1143	1143	1143	1143	1143	1143
50, 270					1024	1036	1036	1036	1036	1036

Firm B	95:7	95:8	95:9	95:10	95:11	95:12
486SX no HD, 4MB ISA	836	836	836	836	836	836
486SX 120MB 4MBhd	1126	1126	1126	1126	1126	1126
486SX-25 no HD 4MB IS	735	735	735	735	735	735
486SX, 120 4IS	735	735	735	735	735	735
486SX-25 no HD 4 MB ISA	716	716	716	716	716	716
486SX, 170, 4, IS	1015	1015	1015	1015	1015	1015
486SX, 240 MB, 4 MB	1048	1048	1048	1048	1048	1048
486SX 170, 4MB	982.25	982.25	982.25	982.25	982.25	982.25
486SX, 240MB, 4MB	1119.5	1119.5	1119.5	1119.5	1119.5	1119.5
486SX33, 170, 4 IS	1245.5	1245.5	1245.5	1245.5	1245.5	1245.5
486SX-25, 120 MB-H	1447	1447	1447	1447	1447	1447
486SX25, 120M B	2274.5	2274.5	2274.5	2274.5	2274.5	2274.5
486sx, noHD, 4MB	713.5	713.5	713.5	713.5	713.5	713.5
25, 170	1317.5	1317.5	1317.5	1317.5	1317.5	1317.5
33, 170	1322.75	1322.75	1322.75	1322.75	1322.75	1322.75
25, no HD, 4MB	781	781	781	781	781	781
25, 170, 4MB	921.5	921.5	921.5	921.5	921.5	921.5
25, 240, 4MB	966	966	966	966	966	966
33, 170, 4 MB	1489.75	1489.75	1489.75	1489.75	1489.75	1489.75
33, 210, 4 MB	975	975	975	975	975	975
25, 210, 4MB	1052.25	1052.25	1052.25	1052.25	1052.25	1052.25
33, 210, 4 MB	1094	1094	1094	1094	1094	1094
33, 210	1686.75	1686.75	1686.75	1686.75	1686.75	1686.75
33, 210	1762	1762	1762	1762	1762	1762
33, 210	1230	1230	1230	1230	1230	1230
25, 210, 4MB	980	980	980	980	980	980
33, 210, 4 MB	1600	1600	1600	1600	1600	1600
50, 340, 4MB	1320	1320	1320	1320	1320	1320
2-50, no HD	1143	1143	1143	1143	1143	1143
50, 270	1036	1036	1036	1036	1036	1036

Firm E	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25, OK Cache VLB			471	436	436	436	420	406	406	394.5
64Kext Cache 25OK EXT Cache omb RAM Baby AT			476	454	454	454	454	454	454	470.25
5X OK Cache, ISA OMB			324	306	306	306	306	306	306	306
25 OK Cache, ISA OMB			275	275	275	275	275	272	272	273
25, 64K Cache				368	368	368	368	368	368	368
25OK Cache, BISA_2VLB							312	297	297	297.75
25OK Cache, 71sA_2VLB										
25OK Cache 35, B_5MB Cache VLB 904928K Cache VLB 904928K Cache 904928K Cache 51SA_2VLB										

Firm E	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
25, OK Cache VLB	394.5	394.5	394.5	394.5	394.5	394.5	394.5	394.5	394.5	394.5
64Kext Cache	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
25OK EXT Cache	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5
omb RAM Baby AT	470.25	470.25	470.25	470.25	470.25	470.25	470.25	470.25	470.25	470.25
8X OK Cache, ISA OMB	302.5	302.5	302.5	302.5	302.5	302.5	302.5	302.5	302.5	302.5
25 OK Cache, ISA OMB	248	248	262.75	263.25	263.25	263.25	263.25	263.25	263.25	236
25, 64K Cache	388	388	388	388	388	388	388	388	388	388
25OK Cache, 8ISA, 2VLB	265	265	266.75	266.75	266.75	266.75	266.75	266.75	266.75	255.5
25OK Cache, 71sA, 2VLB	430	430	443.75	444	444	444	444	444	444	444
25OK Cache 35, 4, 58K			326.25	326.25	326.25	319.5	319.5	319.5	319.5	319.5
Cache VLB 98, 4, 26K			455.5	456	456	444.25	444.25	444.25	444.25	361.75
Cache VLB 98, 4, 26K			627.25	627.25	627.25	627.25	627.25	627.25	627.25	627.25
Cache 98, 4, 26K			492	492	492	492	492	492	492	492
Cache 51SA, 2VLB										382.5

Firm E	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
25, OK Cache VLB	394.5	394.5	394.5	394.5	394.5	394.5	394.5	394.5	394.5	394.5
64Kext Cache	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
256K EXT Cache	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5
omib RAM Baby AT	470.25	470.25	470.25	470.25	470.25	470.25	470.25	470.25	470.25	470.25
8X OK Cache, ISA OMB	302.5	302.5	302.5	302.5	302.5	302.5	302.5	302.5	302.5	302.5
25 OK Cache, ISA OMB	236	236	236	236	236	236	236	236	236	236
25, 64K Cache	388	388	388	388	388	388	388	388	388	388
25OK Cache, BISA 2VLB	249.5	249.5	249.5	249.5	249.5	249.5	249.5	249.5	249.5	249.5
25OK Cache, 71sA,2VLB	444	444	444	444	444	444	444	444	444	444
25OK Cache VLB, 95:5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5	319.5
Cache VLB 95:4, 95:5	352	352	352	352	352	352	352	352	352	352
Cache VLB 95:4, 95:5	627.25	627.25	627.25	627.25	627.25	627.25	627.25	627.25	627.25	627.25
Cache 95:4, 95:5	492	492	492	492	492	492	492	492	492	492
Cache 51SA,2VLB	365.5	365.5	365.5	366	366	366	366	366	366	366

Firm E	95:7	95:8	95:9	95:10	95:11	95:12
25, OK Cache VLB	394.5	394.5	394.5	394.5	394.5	394.5
64Kext Cache	72.5	72.5	72.5	72.5	72.5	72.5
256K EXT Cache	112.5	112.5	112.5	112.5	112.5	112.5
omb RAM Baby AT	470.25	470.25	470.25	470.25	470.25	470.25
8X OK Cache, ISA OMB	302.5	302.5	302.5	302.5	302.5	302.5
25 OK Cache, ISA OMB	236	236	236	236	236	236
25, 64K Cache	368	368	368	368	368	368
25OK Cache, BISA 2VLB	249.5	249.5	249.5	249.5	249.5	249.5
25OK Cache, 71sA,2VLB	444	444	444	444	444	444
25OK Cache 51sA,2VLB	319.5	319.5	319.5	319.5	319.5	319.5
Cache VLB	352	352	352	352	352	352
Cache VLB	627.25	627.25	627.25	627.25	627.25	627.25
Cache	492	492	492	492	492	492
Cache	368	368	368	368	368	368

Firm F	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25,245m										
25, 245m										
33, no HD										
33, 170MB HD										
33,245MB HD										
25, no HD			896	939	939	939	939	939	939	939
25, 80 MB HD			1165	1128	1128	1128	1128	1128	1128	1128
25, 170MB HD			1370	1285	1285	1285	1285	1285	1285	1285
25, 120MB HD				1072	1072	1072	1072	1072	1072	1072
25, 170M HD				1225	1225	1225	1225	1225	1225	1225
25, 120MB HD				1165	1165	1165	1165	1165	1165	1165
25, No HD							984	984	984	978.25
25, 120MB HD							1149	1149	1149	1129.75
25, 245 MB HD							1345	1345	1345	1281.25
33, no HD							1175	1175	1175	1102.75
33, 120 MB HD							1341	1341	1341	1285
33, 245 MB HD							1533	1533	1533	1416.25
25, no HD							1085	1085	1085	1021.75
25, 120 MB HD							1230	1230	1230	1184
25, 245 MB HD							1425	1425	1425	1335.25
33, no HD							1258	1258	1258	1157
33, 120MB HD							1424	1424	1424	1319
33, 245 MB HD							1780	1780	1780	1605.5
25, 245 MB HD							1515	1515	1515	1454
25, 245MB HD							1599	1599	1599	1524.75
33,245MB HD							1710	1710	1710	1589.25
33, 340MB HD							1956	1956	1956	1776.5
33,245MB HD							1615	1615	1615	1470.5
33,245MB HD							1792	1792	1792	1643.25
33, 170								1911	1911	1911
33, 170								2485	2485	2485
33, 340								2963	3084	3084
33, No HD										
25, no HD										862.64
25, no HD										899
25, 120										1038
25, 120										1077

25, 212	1182
25, 212	1230
25, no HD	
25, 170	
25, 170	
33, no HD	
33, 270	
33, 270	
33, 170	
33, 340	
33, 170	
33, 340	
33, 250	
33, 104	
33, 208	
33, 170	
33, 270	
33, 270	
33, 208	
33, 540	
33, 270	
33, 270	
33, 104	
33, 208	
33, 208	
33, 540	
33, 104	
33, 208	
33, 208	
33, 540	
33, 125	
33, 125	
33, no HD	
33, 105	
33, 105	
50, 540	

Firm F	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
25,245m			1324.25	1324.25	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25
25, 245m			1475.75	1475.75	1475.75	1475.75	1475.75	1475.75	1475.75	1475.75
33, no HD			1157	1157	1157	1230	1230	1230	1230	1230
33, 170MB HD			1319	1319	1319	1378.75	1378.75	1378.75	1378.75	1378.75
33,245MB HD			1416.25	1416.25	1431.75	1447.75	1447.75	1447.75	1447.75	1447.75
25, no HD	939	939	939	939	939	939	939	939	939	939
25, 80 MHD	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
25, 170MHD	1285	1285	1285	1285	1285	1285	1285	1285	1285	1285
25, 120MB HD	1072	1072	1072	1072	1072	1072	1072	1072	1072	1072
25, 170M HD	1225	1225	1225	1225	1225	1225	1225	1225	1225	1225
25, 120MB HD	1165	1165	1165	1165	1165	1165	1165	1165	1165	1165
25, No HD	978.25	978.25	978.25	978.25	978.25	978.25	978.25	978.25	978.25	978.25
25, 120MB HD	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75
25, 245 MB HD	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25
33, no HD	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75
33, 120 MB HD	1285	1285	1285	1285	1285	1285	1285	1285	1285	1285
33, 245 MB HD	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25
25, no HD	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75
25, 120 MB HD	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184
25, 245 MB HD	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25
33, no HD	1157	1157	1157	1157	1157	1157	1157	1157	1157	1157
33, 120MB HD	1319	1319	1319	1319	1319	1319	1319	1319	1319	1319
33, 245 MB HD	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5
25, 245 MB HD	1454	1454	1454	1454	1454	1454	1454	1454	1454	1454
25, 245MB HD	1524.75	1524.75	1524.75	1524.75	1524.75	1524.75	1524.75	1524.75	1524.75	1524.75
33,245MB HD	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25
33, 340MB HD	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5
33,245MB HD	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5
33,245MB HD	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25
33, 170	1811	1816	1816	1816	1816	1816	1816	1816	1816	1816
33, 170	2485	2247	2247	2247	2247	2247	2247	2247	2247	2247
33, 340	2829	2829	2829	2829	2829	2829	2829	2829	2829	2829
33, No HD										
25, no HD	882.64	882.64	805.5	805.5	805.5	805.5	805.5	805.5	805.5	805.5
25, no HD	899	899	772.5	772.5	772.5	772.5	772.5	772.5	772.5	772.5
25, 120	1038	1038	894.25	894.25	894.25	894.25	894.25	894.25	894.25	894.25
25, 120	1077	1077	931.25	931.25	941.5	952	952	952	952	952

25, 212	1192	1192	1000.25	1000.25	1000.25	1011.25	1011.25	1011.25	1011.25	1011.25
25, 212	1230	1230	1037.25	1037.25	1037.25	1048.75	1048.75	1048.75	1048.75	1048.75
25, no HD			1021.75	1021.75	1021.75	1086.25	1086.25	1086.25	1086.25	1086.25
25, 170			1184	1184	1186.75	1210	1210	1210	1210	1210
25, 170			1520.75	1520.75	1430.5	1430.5	1430.5	1430.5	1430.5	1244
33, no HD										1330
33, 270										1495
33, 270										
33, 170										3346
33, 340										3824
33, 170										
33, 340										
33, 280										
33, 104										
33, 208										
33, 170										
33, 270										
33, 270										
33, 208										
33, 540										
33, 270										
33, 270										
33, 104										2006
33, 208										2226
33, 208										2336
33, 540										2630
33, 104										
33, 208										
33, 208										
33, 540										
33, 125										
33, 125										
33, no HD										
33, 106										
33, 106										
50, 540										

Firm F	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
25,245m	1146	1146	1146	1146	1146	1146	1146	1146	1146	1146
25, 245m	1341	1341	1341	1341	1341	1341	1341	1341	1341	1341
33, no HD	1029	1029	1029	1029	1029	1029	1029	1029	1029	1029
33, 170MB HD	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162
33,245MB HD	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
25, no HD	939	939	939	939	939	939	939	939	939	939
25, 80 MHD	1126	1126	1126	1126	1126	1126	1126	1126	1126	1126
25, 170M HD	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265
25, 120MB HD	1072	1072	1072	1072	1072	1072	1072	1072	1072	1072
25, 170M HD	1225	1225	1225	1225	1225	1225	1225	1225	1225	1225
25, 120MB HD	1165	1165	1165	1165	1165	1165	1165	1165	1165	1165
25, No HD	978.25	978.25	978.25	978.25	978.25	978.25	978.25	978.25	978.25	978.25
25, 120MB HD	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75
25, 245 MB HD	1261.25	1261.25	1261.25	1261.25	1261.25	1261.25	1261.25	1261.25	1261.25	1261.25
33, no HD	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75
33, 120 MB HD	1265	1265	1265	1265	1265	1265	1265	1265	1265	1265
33, 245 MB HD	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25
25, no HD	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75
25, 120 MB HD	1184	1184	1184	1184	1184	1184	1184	1184	1184	1184
25, 245 MB HD	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25	1335.25
33, no HD	1157	1157	1157	1157	1157	1157	1157	1157	1157	1157
33, 120MB HD	1319	1319	1319	1319	1319	1319	1319	1319	1319	1319
33, 245 MB HD	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5
25, 245 MB HD	1454	1454	1454	1454	1454	1454	1454	1454	1454	1454
25, 245MB HD	1524.75	1454	1454	1454	1454	1454	1454	1454	1454	1454
33,245MB HD	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25
33, 340MB HD	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5
33,245MB HD	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5
33,245MB HD	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25
33, 170	1816	1816	1816	1816	1816	1816	1816	1816	1816	1816
33, 170	2247	2247	2247	2247	2247	2247	2247	2247	2247	2247
33, 340	2629	2629	2629	2629	2629	2629	2629	2629	2629	2629
33, No HD	1385	1432	916.75	916.75	916.75	916.75	916.75	916.75	916.75	1432
25, no HD	805.5	805.5	955.75	955.75	955.75	955.75	955.75	955.75	955.75	805.5
25, no HD	794	794	943	943	943	943	943	943	943	794
25, 120	919	919	1210	1210	1210	1210	1210	1210	1210	919
25, 120	885.5	885.25	1244	1244	1244	1244	1244	1244	1244	885.25

25, 212	916.75	916.75	1330	1330	1330	1330	1330	1330	1330	916.75
25, 212	955.75	955.75	1495	1495	1495	1495	1495	1495	1495	955.75
25, no HD	943	943	1880	1880	1880	1880	1880	1880	1880	943
25, 170	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210
25, 170	1244	1244	1244	1244	1244	1244	1244	1244	1244	1244
33, no HD	1330	1330	1330	1330	1330	1330	1330	1330	1330	1330
33, 270	1495	1495	1495	1495	1495	1495	1495	1495	1495	1495
33, 270	1880	1880	1880	1880	1880	1880	1880	1880	1880	1880
33, 170	3346	3346	3346	2676	2462	2132	2132	2132	2132	2132
33, 340	3824	3824	3824	2988	2750	2475	2475	2475	2428	2428
33, 170	2772	2772	2772	2772	2772	2772	2772	2772	2772	2772
33, 340	3250	3250	3250	3250	3250	3250	3250	3250	3250	3250
33, 250	2687	2687	2687	2687	2687	2687	2687	2687	2687	2687
33, 104				1511	1511	1511	1511	1511	1511	1511
33, 208				1594	1594	1594	1594	1594	1594	1594
33, 170				1649	1649	1649	1649	1649	1649	1649
33, 270				1731	1731	1731	1731	1731	1586	1586
33, 270				1896	1896	1896	1896	1896	1704	1704
33, 208				1704	1704	1704	1704	1704	1704	1704
33, 540				1896	1896	1896	1896	1896	1896	1896
33, 270				1841	1841	1841	1841	1841	1676	1676
33, 270				2006	2006	2006	2006	2006	1814	1814
33, 104	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006
33, 208	2226	2226	2226	2226	2226	2226	2226	2226	2226	2226
33, 208	2336	2336	2336	2336	2336	2336	2336	2336	2336	2336
33, 540	2630	2630	2630	2630	2630	2630	2630	2630	2630	2630
33, 104	1961	1961	1961	1961	1961	1961	1961	1961	1961	1961
33, 208	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018
33, 208	2131	2131	2131	2131	2131	2131	2131	2131	2131	2131
33, 540	2927	2927	2927	2927	2927	2927	2927	2927	2927	2927
33, 125				1494	1307	1307	1307	1307	1307	1307
33, 125				2521	2335	2335	2335	2335	2335	2335
33, no HD									2516	2516
33, 105									2742	2742
33, 105									3017	3017
50, 540									1283	1283

Firm F	95:7	95:8	95:9	95:10	95:11	95:12
25,245m	1146	1146	1146	1146	1146	1146
25, 245m	1341	1341	1341	1341	1341	1341
33, no HD	1029	1029	1029	1029	1029	1029
33, 170MB HD	1162	1162	1162	1162	1162	1162
33,245MB HD	1282.5	1282.5	1282.5	1282.5	1282.5	1282.5
25, no HD	939	939	939	939	939	939
25, 80 MH-D	1126	1126	1126	1126	1126	1126
25, 170MH-D	1285	1285	1285	1285	1285	1285
25, 120MB HD	1072	1072	1072	1072	1072	1072
25, 170M HD	1225	1225	1225	1225	1225	1225
25, 120MB HD	1165	1165	1165	1165	1165	1165
25, No HD	978.25	978.25	978.25	978.25	978.25	978.25
25, 120MB HD	1129.75	1129.75	1129.75	1129.75	1129.75	1129.75
25, 245 MB HD	1281.25	1281.25	1281.25	1281.25	1281.25	1281.25
33, no HD	1102.75	1102.75	1102.75	1102.75	1102.75	1102.75
33, 120 MB HD	1285	1285	1285	1285	1285	1285
33, 245 MB HD	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25
25, no HD	1021.75	1021.75	1021.75	1021.75	1021.75	1021.75
25, 120 MB HD	1184	1184	1184	1184	1184	1184
25, 245 MB HD	1336.25	1336.25	1336.25	1336.25	1336.25	1336.25
33, no HD	1157	1157	1157	1157	1157	1157
33, 120MB HD	1319	1319	1319	1319	1319	1319
33, 245 MB HD	1605.5	1605.5	1605.5	1605.5	1605.5	1605.5
25, 245 MB HD	1454	1454	1454	1454	1454	1454
25, 245MB HD	1454	1454	1454	1454	1454	1454
33,245MB HD	1589.25	1589.25	1589.25	1589.25	1589.25	1589.25
33, 340MB HD	1778.5	1778.5	1778.5	1778.5	1778.5	1778.5
33,245MB HD	1470.5	1470.5	1470.5	1470.5	1470.5	1470.5
33,245MB HD	1643.25	1643.25	1643.25	1643.25	1643.25	1643.25
33, 170	1816	1816	1816	1816	1816	1816
33, 170	2247	2247	2247	2247	2247	2247
33, 340	2829	2829	2829	2829	2829	2829
33, No HD	916.75	916.75	916.75	916.75	916.75	916.75
25, no HD	955.75	955.75	955.75	955.75	955.75	955.75
25, no HD	943	943	943	943	943	943
25, 120	1210	1210	1210	1210	1210	1210
25, 120	1244	1244	1244	1244	1244	1244

25, 212	1330	1330	1330	1330	1330	1330
25, 212	1495	1495	1495	1495	1495	1495
25, no HD	1880	1880	1880	1880	1880	1880
25, 170	1210	1210	1210	1210	1210	1210
25, 170	1244	1244	1244	1244	1244	1244
33, no HD	1330	1330	1330	1330	1330	1330
33, 270	1495	1495	1495	1495	1495	1495
33, 270	1880	1880	1880	1880	1880	1880
33, 170	2132	2132	2132	2132	2132	2132
33, 340	2428	2428	2428	2428	2428	2428
33, 170	2772	2772	2772	2772	2772	2772
33, 340	3250	3250	3250	3250	3250	3250
33, 250	2887	2887	2887	2887	2887	2887
33, 104	1511	1511	1511	1511	1511	1511
33, 208	1594	1594	1594	1594	1594	1594
33, 170	1649	1649	1649	1649	1649	1649
33, 270	1566	1566	1566	1566	1566	1566
33, 270	1704	1704	1704	1704	1704	1704
33, 208	1704	1704	1704	1704	1704	1704
33, 340	1896	1896	1896	1896	1896	1896
33, 270	1676	1676	1676	1676	1676	1676
33, 270	1814	1814	1814	1814	1814	1814
33, 104	2006	2006	2006	2006	2006	2006
33, 208	2226	2226	2226	2226	2226	2226
33, 208	2336	2336	2336	2336	2336	2336
33, 340	2630	2630	2630	2630	2630	2630
33, 104	1981	1981	1981	1981	1981	1981
33, 208	2018	2018	2018	2018	2018	2018
33, 208	2131	2131	2131	2131	2131	2131
33, 340	2927	2927	2927	2927	2927	2927
33, 125	1307	1307	1307	1307	1307	1307
33, 125	2335	2335	2335	2335	2335	2335
33, no HD	2516	2516	2516	2516	2516	2516
33, 105	2742	2742	2742	2742	2742	2742
33, 105	3017	3017	3017	3017	3017	3017
50, 540	1263	1263	1263	1263	1263	1263

Firm H	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25mhz			412	412	412	412	412	412	412	347
25,CPU 25			729	729	729	729	729	729	729	729
25 CPU			700	700	700	700	700	700	700	700
25 CPU 25			824	824	824	824	824	824	824	824
25CPU 25			882	882	882	882	882	882	882	882
25 CPU 25			1035	1035	1035	1035	1035	1035	1035	1035
25 CPU 25			1341	1341	1341	1341	1341	1341	1341	1341
25 CPU 25							700	700	700	699.5
25 CPU 25							1000	1000	1000	1012.75
25 CPU 25							1300	1300	1300	1394
25 CPU 25							2782	2782	2782	2573.25
25 CPU 25							4853	4853	4853	4835
33 CPU								485	485	429.25
33 CPU								818	818	817
33 CPU								971	971	968.25
33, CPU								1124	1124	119.5
33 CPU								1429	1429	1422.5
33 CPU								2559	2559	2690.75
33 CPU								4324	4324	4585
33 CPU								485	485	430
33 CPU								485	485	430
33 CPU										

Firm H	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
25mhz	294	294	304.5	310	310	313.25	313.25	313.25	313.25	313.25
25 CPU 25	729	729	729	729	729	729	729	729	729	729
25 CPU	700	700	700	700	700	700	700	700	700	700
25 CPU 25	824	824	824	824	824	824	824	824	824	824
25 CPU 25	882	882	882	882	882	882	882	882	882	882
25 CPU 25	1035	1035	1035	1035	1035	1035	1035	1035	1035	1035
25 CPU 25	1341	1341	1341	1341	1341	1341	1341	1341	1341	1341
25 CPU 25	669.5	669.5	658.5	647.5	670.25	677.25	677.25	677.25	677.25	677.25
25 CPU 25	1046.25	1046.25	951	951	1002.5	1013	1013	1013	1013	1013
25 CPU 25	1394	1394	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25
25 CPU 25	2573.25	2573.25	2300.25	2409	2409	2434.25	2434.25	2434.25	2434.25	2434.25
25 CPU 25	4635	4635	4143	4336	4336	4379.5	4379.5	4379.5	4379.5	4379.5
33 CPU	298	298	304.5	310	310	250.75	250.75	250.75	250.75	253.5
33 CPU	817	817	742.75	783	783	791	791	791	791	460
33 CPU	988.25	988.25	934.25	951.75	951.75	981.75	981.75	981.75	981.75	627
33, CPU	1163.25	1163.25	1089.75	1089	1089.5	1100.75	1100.75	1100.75	1100.75	794
33 CPU	1510	1510	1388.5	1413.75	1413.75	1428.5	1428.5	1428.5	1428.5	1133
33 CPU	2690.75	2690.75	2405.25	2519	2519	2545.5	2545.5	2545.5	2545.5	2545.5
33 CPU	4585	4585	4080	4273	4273	4318.25	4318.25	4318.25	4318.25	4318.25
33 CPU	298.75	298.75	298.75	310.75	310.75	251.5	251.5	251.5	251.5	254
33 CPU	298.75	298.75	298.75	300	300	245.75	245.75	245.75	245.75	254
33 CPU	304.5	304.5	304.5	310	310	250.75	250.75	250.75	250.75	253.5

Firm H	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
25mhz	313.25	313.25	313.25	313.25	313.25	313.25	313.25	313.25	313.25	313.25
25,CPU 25	729	729	729	729	729	729	729	729	729	729
25 CPU	700	700	700	700	700	700	700	700	700	700
25 CPU 25	824	824	824	824	824	824	824	824	824	824
25CPU 25	882	882	882	882	882	882	882	882	882	882
25 CPU 25	1035	1035	1035	1035	1035	1035	1035	1035	1035	1035
25 CPU 25	1341	1341	1341	1341	1341	1341	1341	1341	1341	1341
25 CPU 25	677.25	677.25	677.25	677.25	677.25	677.25	677.25	677.25	677.25	677.25
25 CPU 25	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013
25 CPU 25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25
25 CPU 25	2434.25	2434.25	2434.25	2434.25	2434.25	2434.25	2434.25	2434.25	2434.25	2434.25
25 CPU 25	4379.5	4379.5	4379.5	4379.5	4379.5	4379.5	4379.5	4379.5	4379.5	4379.5
33 CPU	253.5	253.5	253.5	253.5	253.5	253.5	253.5	253.5	253.5	253.5
33 CPU	480	480	480	413.5	413.5	413.5	413.5	413.5	413.5	413.5
33 CPU	627	627	627	584.5	584.5	584.5	584.5	584.5	584.5	584.5
33, CPU	794	794	702	702	702	702	702	702	702	702
33 CPU	1133	1133	1133	905	905	905	905	905	905	905
33 CPU	2545.5	2545.5	2545.5	2545.5	2545.5	2545.5	2545.5	2545.5	2545.5	2545.5
33 CPU	4318.25	4318.25	4318.25	4318.25	4318.25	4318.25	4318.25	4318.25	4318.25	4318.25
33 CPU	254	254	254	254	254	254	254	254	254	254
33 CPU	254	254	254	254	254	254	254	254	254	254
33 CPU	253.5	253.5	253.5	253.5	253.5	253.5	253.5	253.5	253.5	253.5

Firm H	95:7	95:8	95:9	95:10	95:11	95:12
25mhz	313.25	313.25	313.25	313.25	313.25	313.25
25,CPU 25	729	729	729	729	729	729
25 CPU	700	700	700	700	700	700
25 CPU 25	824	824	824	824	824	824
25CPU 25	882	882	882	882	882	882
25 CPU 25	1035	1035	1035	1035	1035	1035
25 CPU 25	1341	1341	1341	1341	1341	1341
25 CPU 25	677.25	677.25	677.25	677.25	677.25	677.25
25 CPU 25	1013	1013	1013	1013	1013	1013
25 CPU 25	1362.25	1362.25	1362.25	1362.25	1362.25	1362.25
25 CPU 25	2434.25	2434.25	2434.25	2434.25	2434.25	2434.25
25 CPU 25	4379.5	4379.5	4379.5	4379.5	4379.5	4379.5
33 CPU	253.5	253.5	253.5	253.5	253.5	253.5
33 CPU	413.5	413.5	413.5	413.5	413.5	413.5
33 CPU	564.5	564.5	564.5	564.5	564.5	564.5
33, CPU	702	702	702	702	702	702
33 CPU	905	905	905	905	905	905
33 CPU	2545.5	2545.5	2545.5	2545.5	2545.5	2545.5
33 CPU	4318.25	4318.25	4318.25	4318.25	4318.25	4318.25
33 CPU	254	254	254	254	254	254
33 CPU	254	254	254	254	254	254
33 CPU	253.5	253.5	253.5	253.5	253.5	253.5

Firm I	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25 No HD			980	901	901	901	901	901	901	901
25, 107 HD			1210	1109	1109	1109	1109	1109	1109	1109
25 minitwr			1380	1288	1288	1288	1288	1288	1288	1288
33 minitwr			1051	984	984	984	984	984	984	984
33 minitwr			1278	1172	1172	1172	1172	1172	1172	1172
33 minitwr			1448	1328	1328	1328	1328	1328	1328	1328
25 dsktop			899	828	828	828	828	828	828	828
33dsktop			989	890	890	890	890	890	890	890
33, no HD			1177	1177	1177	1177	1177	1177	1177	1177
33,120 bundl			1723	1723	1723	1723	1688	1688	1688	1688
33,210, 8MB			1814	1814	1814	1814	1814	1814	1814	1814
33, no HD, 4MB			1811	1811	1811	1811	1811	1811	1811	1811
33, 170, 8 MB							2112	2112	2112	2112
25, no HD, 2MB										885.25
25, 170, 4MB										109
25, 340, 8 MB										1541.25
25, 120, 4MB										978.5
33, no HD, 2MB										852
33, 120, 4 MB										1139.25
25, 80, 4MB										1608.25
25, 170, 4MB										1819.25
25, 170,4MB										2487.5
25, 170, 4MB										3485.25
25, 170 4MB										
33, 170, 4MB										
25, 120, 4MB										
33,noHD,4MB										
33, 170, 4MB										
33, 270, 8MB										
50, noHD, 4MB										
50, 170,4MB										
50,210,*MB										
50,210.8MB										
50,270,8MB										
33,200										
33,200										
33,noHD,2MB										
33,170,4MB										
33,340,8MB										
50CPU										
50CPU										
50CPU										
50CPU										
33CPU										
33CPU										
50,no HD										

50, 170
50, 340
33, 250
33, 340
50, no HD
50, 270
50, 540
33, 200
33, 200

Firm I	94:1	94:2	94:3	94:4	94:5	94:6	95:7	94:8	94:9	94:10
25 No HD	901	901	901	901	901	901	901	901	901	901
25, 107 HD	1109	1109	1109	1109	1109	1109	1109	1109	1109	1109
25 minitwr	1286	1286	1286	1286	1286	1286	1286	1286	1286	1286
33 minitwr	964	964	964	964	964	964	964	964	964	964
33 minitwr	1172	1172	1172	1172	1172	1172	1172	1172	1172	1172
33 minitwr	1326	1326	1326	1326	1326	1326	1326	1326	1326	1326
25 dsktop	826	826	826	826	826	826	826	826	826	826
33dsktop	890	890	890	890	890	890	890	890	890	890
33, no HD	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
33,120 bundl	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686
33,210, 8MB	1814	1814	1814	1814	1814	1814	1814	1814	1814	1814
33, no HD, 4MB	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611
33, 170, 8 MB	1937.75	1937.75	1939	1939	1939	1939	1939	1939	1939	1939
25, no HD, 2MB	865.25	865.25	866	843.5	890.25	893.25	893.25	893.25	893.25	893.25
25, 170, 4MB	1113.25	1113.25	1114	1093	1113.5	1130	1130	1130	1130	1130
25, 340, 8 MB	1541.25	1541.25	1542.5	1542.5	1606	1611.5	1611.5	1611.5	1611.5	1611.5
25, 120, 4MB	978.5	978.5	979.25	979.25	979.25	989.25	989.25	989.25	989.25	989.25
33, no HD, 2MB	843.75	843.75	890.25	773.5	826	826	826	826	826	826
33, 120, 4 MB	1032.25	1032.25	1033	971	1022.75	1037.5	1037.5	1037.5	1037.5	1037.5
25, 80, 4MB	1606.25	1606.25	1553.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5
25, 170, 4MB	1819.25	1819.25	1740.25	1759.25	1467.5	1488.75	1488.75	1488.75	1488.75	1488.75
25, 170, 4MB	2489.25	2489.25	2366.75	2360.75	2360.75	2360.75	2360.75	2360.75	2360.75	2360.75
25, 170, 4MB	3206.75	3206.75	3053.25	2799.5	2620.25	2661.25	2661.25	2661.25	2661.25	2607
25, 170 4MB			3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25
33, 170, 4MB			1529.75	1615	1564.75	1587.75	1587.75	1587.75	1587.75	1587.75
25, 120, 4MB				1674.25	1429.5	1434.5	1434.5	1434.5	1434.5	1434.5
33,noHD,4MB										924
33, 170, 4MB										1073
33, 270, 8MB										1326
50, noHD, 4MB										1072
50, 170, 4MB										1249
50,210,*MB										1693
50,210,8MB										1928
50,270,8MB										1466
33,200										2288.25
33,200										1576
33,noHD,2MB										903
33,170,4MB										1172.5
33,340,8MB										1630
50CPU										1129
50CPU										1332.25
50CPU										1784.25
50CPU										1558.25
33CPU										1129
33CPU										1153.75
50,no HD										1117

50, 170
50, 340
33, 250
33, 340
50, no HD
50, 270
50, 540
33, 200
33, 200

1316
1816

Firm I	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6	95:6	95:7
25 No HD	901	901	901	901	901	901	901	901	901	901
25, 107 HD	1109	1109	1109	1109	1109	1109	1109	1109	1109	1109
25 minitwr	1288	1288	1288	1288	1288	1288	1288	1288	1288	1288
33 minitwr	984	984	984	984	984	984	984	984	984	984
33 minitwr	1172	1172	1172	1172	1172	1172	1172	1172	1172	1172
33 minitwr	1328	1328	1328	1328	1328	1328	1328	1328	1328	1328
25 dsktop	828	828	828	828	828	828	828	828	828	828
33dsktop	890	890	890	890	890	890	890	890	890	890
33, no HD	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
33,120 bundl	1688	1688	1688	1688	1688	1688	1688	1688	1688	1688
33,210, 8MB	1814	1814	1814	1814	1814	1814	1814	1814	1814	1814
33, no HD, 4MB	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611
33, 170, 8 MB	1939	1939	1939	1939	1939	1939	1939	1939	1939	1939
25, no HD, 2MB	893.25	893.25	893.25	893.25	893.25	893.25	893.25	893.25	893.25	893.25
25, 170, 4MB	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130
25, 340, 8 MB	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5
25, 120, 4MB	989.25	989.25	989.25	989.25	989.25	989.25	989.25	989.25	989.25	989.25
33, no HD, 2MB	828	828	828	828	828	828	828	828	828	828
33, 120, 4 MB	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5
25, 80, 4MB	1589.5	1589.5	1589.5	1589.5	1589.5	1589.5	1589.5	1589.5	1589.5	1589.5
25, 170, 4MB	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75
25, 170, 4MB	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75
25, 170, 4MB	2839	2839	2839	2875	2875	2875	2875	2875	2875	2875
25, 170 4MB	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25
33, 170, 4MB	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75
25, 120, 4MB	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5
33,noHD,4MB	903	903	903	822	822	822	822	822	822	822
33, 170, 4MB	1104	1104	1104	1104	1104	1104	1104	1104	1104	1104
33, 270, 8MB	1328	1328	1328	1242	1242	1242	1242	1242	1242	1242
50, noHD, 4MB	1038	850	850	850	850	850	850	850	850	850
50, 170, 4MB	1215	1215	1215	1009	1009	1009	1009	1009	1009	1009
50,210,*MB	1683	1683	1683	1556	1556	1556	1556	1556	1556	1556
50,210,8MB	1928	1928	1928	1412	1412	1412	1412	1412	1412	1412
50,270,8MB	1488	1488	1488	1289	1289	1289	1289	1289	1289	1289
33,200	2224	2199	2199	2199	2199	2199	2199	2199	2199	2199
33,200	1572	1572	1572	1572	1572	1572	1572	1572	1572	1572
33,noHD,2MB	903	903	903	688	688	688	688	688	688	688
33,170,4MB	1172.5	1172.5	1172.5	1022	1022	1022	1022	1022	1022	1022
33,340,8MB	1583	1583	1583	1153	1153	1153	1153	1153	1153	1153
50CPU	1142	1142	1142	1104	1106	1106	1106	1106	1106	1106
50CPU	1277	1277	1277	1236	1236	1236	1236	1236	1236	1236
50CPU	1800	1800	1800	1741	1742	1742	1742	1742	1742	1742
60CPU	1573	1573	1573	1521	1522	1522	1522	1522	1522	1522
33CPU	1142	1142	1142	1104	1106	1106	1106	1106	1106	1106
33CPU	1185	1185	1185	1127	1128	1128	1128	1128	1128	1128
50,no HD	1143	1143	1143	777	777	777	777	777	777	777

50, 170	1331	1331	1331	1100	1100	1100	1100	1100	1100	1100
50, 340	1744	1744	1744	1197	1197	1197	1197	1197	1197	1197
33, 250	2320	2320	2320	2056	2057	2057	2057	2057	2057	2057
33, 340	2513	2513	2513	2197	2198	2198	2198	2198	2198	2198
50, no HD	1221	1221	1221	917	917	917	917	917	917	917
50, 270	1664	1664	1664	1335	1335	1335	1335	1335	1335	1335
50, 540	1880	1880	1880	1423	1423	1423	1423	1423	1423	1423
33, 200				2001	2001	2001	2001	2001	2001	2001
33, 200				2198	2198	2198	2198	2198	2198	2198

Firm I	95:8	95:9	95:9	95:10	95:11	95:12
25 No HD	901	901	901	901	901	901
25, 107 HD	1109	1109	1109	1109	1109	1109
25 minitwr	1288	1288	1288	1288	1288	1288
33 minitwr	984	984	984	984	984	984
33 minitwr	1172	1172	1172	1172	1172	1172
33 minitwr	1328	1328	1328	1328	1328	1328
25 deldop	828	828	828	828	828	828
33deldop	890	890	890	890	890	890
33, no HD	1177	1177	1177	1177	1177	1177
33,120 bundl	1688	1688	1688	1688	1688	1688
33,210, 8MB	1814	1814	1814	1814	1814	1814
33, no HD, 4MB	1611	1611	1611	1611	1611	1611
33, 170, 8 MB	1939	1939	1939	1939	1939	1939
25, no HD, 2MB	893.25	893.25	893.25	893.25	893.25	893.25
25, 170, 4MB	1130	1130	1130	1130	1130	1130
25, 340, 8 MB	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5
25, 120, 4MB	989.25	989.25	989.25	989.25	989.25	989.25
33, no HD, 2MB	828	828	828	828	828	828
33, 120, 4 MB	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5
25, 80, 4MB	1589.5	1589.5	1589.5	1589.5	1589.5	1589.5
25, 170, 4MB	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75
25, 170, 4MB	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75
25, 170, 4MB	2675	2675	2675	2675	2675	2675
25, 170 4MB	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25
33, 170, 4MB	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75
25, 120, 4MB	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5
33,noHD,4MB	822	822	822	822	822	822
33, 170, 4MB	1104	1104	1104	1104	1104	1104
33, 270, 8MB	1242	1242	1242	1242	1242	1242
50, noHD, 4MB	890	890	890	890	890	890
50, 170, 4MB	1009	1009	1009	1009	1009	1009
50,210, 4MB	1586	1586	1586	1586	1586	1586
50,210,8MB	1412	1412	1412	1412	1412	1412
50,270,8MB	1289	1289	1289	1289	1289	1289
33,200	2199	2199	2199	2199	2199	2199
33,200	1572	1572	1572	1572	1572	1572
33,noHD,2MB	688	688	688	688	688	688
33,170,4MB	1022	1022	1022	1022	1022	1022
33,340,8MB	1153	1153	1153	1153	1153	1153
50CPU	1105	1105	1105	1105	1105	1105
50CPU	1236	1236	1236	1236	1236	1236
50CPU	1742	1742	1742	1742	1742	1742
50CPU	1522	1522	1522	1522	1522	1522
33CPU	1108	1108	1108	1108	1108	1108
33CPU	1128	1128	1128	1128	1128	1128
50,no HD	777	777	777	777	777	777

50, 170	1100	1100	1100	1100	1100	1100
50, 340	1197	1197	1197	1197	1197	1197
33, 250	2057	2057	2057	2057	2057	2057
33, 340	2198	2198	2198	2198	2198	2198
50, no HD	917	917	917	917	917	917
50, 270	1335	1335	1335	1335	1335	1335
50, 540	1423	1423	1423	1423	1423	1423
33, 200	2001	2001	2001	2001	2001	2001
33, 200	2199	2199	2199	2199	2199	2199

Firm M	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25, no HD			1667	1559	1559	1559	1559	1559	1559	1559
25,210HD			2383	2229	2229	2229	2229	2229	2229	2229
25, no HD, 2MB			814	814	814	814	787	787	787	787
25, no HD, 2MB			905	905	905	905	905	905	905	905
25,120 HD Bundl			1450	1450	1450	1450	1450	1450	1450	1450
33, no HD 2MB			1086	1086	1086	1086	1050	1050	1050	1050
33, no HD			1177	1177	1177	1177	1177	1177	1177	1177
33,120 bundl			1723	1723	1723	1723	1686	1686	1686	1686
33,210, 8MB			1814	1814	1814	1814	1814	1814	1814	1814
33, no HD, 4MB			1611	1611	1611	1611	1611	1611	1611	1611
33, 170, 8 MB							2112	2112	2112	2112
25, no HD, 2MB										865.25
25, 170, 4MB										109
25, 340, 8 MB										1541.25
25, 120, 4MB										978.5
33, no HD, 2MB										952
33, 120, 4 MB										1139.25
25, 80, 4MB										1606.25
25, 170, 4MB										1819.25
25, 170,4MB										2487.5
25, 170, 4MB										3485.25
25, 170 4MB										
33, 170, 4MB										
25, 120, 4MB										
33,noHD,4MB										
33, 170, 4MB										
33, 270, 8MB										
50, noHD, 4MB										
50, 170,4MB										
50,210,4MB										
50,210,8MB										
50,270,8MB										
33,200										
33,200										
33,noHD,2MB										
33,170,4MB										
33,340,8MB										
50CPU										
50CPU										
50CPU										
50CPU										
33CPU										
33CPU										
50,no HD										
50, 170										

50, 340
33, 250
33, 340
50, no HD
50, 270
50, 540
33, 200
33, 200

Firm M	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
25, no HD	1559	1559	1559	1559	1559	1559	1559	1559	1559	1559
25,210HD	2229	2229	2229	2229	2229	2229	2229	2229	2229	2229
25, no HD, 2MB	787	787	787	787	787	787	787	787	787	787
25, no HD, 2MB	905	905	905	905	905	905	905	905	905	905
25,120 HD Bundl	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
33, no HD 2MB	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
33, no HD	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
33,120 bundl	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686
33,210, 8MB	1814	1814	1814	1814	1814	1814	1814	1814	1814	1814
33, no HD, 4MB	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611
33, 170, 8 MB	1937.75	1937.75	1939	1939	1939	1939	1939	1939	1939	1939
25, no HD, 2MB	895.25	895.25	898	843.6	890.25	893.25	893.25	893.25	893.25	893.25
25, 170, 4MB	1113.25	1113.25	1114	1093	1113.5	1130	1130	1130	1130	1130
25, 340, 8 MB	1541.25	1541.25	1542.5	1542.5	1806	1611.5	1611.5	1611.5	1611.5	1611.5
25, 120, 4MB	978.5	978.5	979.25	979.25	979.25	989.25	989.25	989.25	989.25	989.25
33, no HD, 2MB	843.75	843.75	880.25	773.5	826	826	826	826	826	826
33, 120, 4 MB	1032.25	1032.25	1033	971	1022.75	1037.5	1037.5	1037.5	1037.5	1037.5
25, 80, 4MB	1606.25	1606.25	1553.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5
25, 170, 4MB	1819.25	1819.25	1740.25	1759.25	1487.5	1488.75	1488.75	1488.75	1488.75	1488.75
25, 170, 4MB	2489.25	2489.25	2366.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75
25, 170, 4MB	3208.75	3208.75	3053.25	2798.5	2830.25	2881.25	2881.25	2881.25	2881.25	2807
25, 170 4MB			3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25
33, 170, 4MB			1829.75	1615	1564.75	1587.75	1587.75	1587.75	1587.75	1587.75
25, 120, 4MB				1674.25	1429.5	1434.5	1434.5	1434.5	1434.5	1434.5
33,noHD,4MB										924
33, 170, 4MB										1073
33, 270, 8MB										1326
50, noHD, 4MB										1072
50, 170, 4MB										1249
50,210,4MB										1693
50,210,8MB										1928
50,270,8MB										1468
33,200										2288.25
33,200										1578
33,noHD,2MB										903
33,170,4MB										1172.5
33,340,8MB										1630
50CPU										1129
50CPU										1332.25
50CPU										1784.25
50CPU										1558.25
33CPU										1129
33CPU										1153.75
50,no HD										1117
50, 170										1316

50, 340

1516

33, 230

33, 340

50, no HD

50, 270

50, 540

33, 200

33, 200

Firm M	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
25, no HD	1559	1559	1559	1559	1559	1559	1559	1559	1559	1559
25,210HD	2229	2229	2229	2229	2229	2229	2229	2229	2229	2229
25, no HD, 2MB	787	787	787	787	787	787	787	787	787	787
25, no HD, 2MB	905	905	905	905	905	905	905	905	905	905
25,120 HD Bundl	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
33, no HD 2MB	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
33, no HD	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
33,120 bundl	1686	1686	1686	1686	1686	1686	1686	1686	1686	1686
33,210, 8MB	1814	1814	1814	1814	1814	1814	1814	1814	1814	1814
33, no HD, 4MB	1611	1611	1611	1611	1611	1611	1611	1611	1611	1611
33, 170, 8 MB	1939	1939	1939	1939	1939	1939	1939	1939	1939	1939
25, no HD, 2MB	893.25	893.25	893.25	893.25	893.25	893.25	893.25	893.25	893.25	893.25
25, 170, 4MB	1130	1130	1130	1130	1130	1130	1130	1130	1130	1130
25, 340, 8 MB	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5
25, 120, 4MB	989.25	989.25	989.25	989.25	989.25	989.25	989.25	989.25	989.25	989.25
33, no HD, 2MB	826	826	826	826	826	826	826	826	826	826
33, 120, 4 MB	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5
25, 80, 4MB	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5
25, 170, 4MB	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75
25, 170, 4MB	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75
25, 170, 4MB	2675	2675	2675	2675	2675	2675	2675	2675	2675	2675
25, 170 4MB	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25
33, 170, 4MB	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75
25, 120, 4MB	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5
33,noHD,4MB	903	903	903	822	822	822	822	822	822	822
33, 170, 4MB	1104	1104	1104	1104	1104	1104	1104	1104	1104	1104
33, 270, 8MB	1326	1326	1326	1242	1242	1242	1242	1242	1242	1242
50, noHD, 4MB	1036	850	850	850	850	850	850	850	850	850
50, 170, 4MB	1215	1215	1215	1009	1009	1009	1009	1009	1009	1009
50,210, 1MB	1663	1663	1663	1556	1556	1556	1556	1556	1556	1556
50,210,8MB	1926	1926	1926	1412	1412	1412	1412	1412	1412	1412
50,270,8MB	1466	1466	1466	1269	1269	1269	1269	1269	1269	1269
33,200	2224	2199	2199	2199	2199	2199	2199	2199	2199	2199
33,200	1572	1572	1572	1572	1572	1572	1572	1572	1572	1572
33,noHD,2MB	903	903	903	688	688	688	688	688	688	688
33,170,4MB	1172.5	1172.5	1172.5	1022	1022	1022	1022	1022	1022	1022
33,340,8MB	1563	1563	1563	1153	1153	1153	1153	1153	1153	1153
50CPU	1142	1142	1142	1104	1105	1105	1105	1105	1105	1105
50CPU	1277	1277	1277	1236	1236	1236	1236	1236	1236	1236
50CPU	1800	1800	1800	1741	1742	1742	1742	1742	1742	1742
50CPU	1573	1573	1573	1521	1522	1522	1522	1522	1522	1522
33CPU	1142	1142	1142	1104	1106	1106	1106	1106	1106	1106
33CPU	1166	1166	1166	1127	1128	1128	1128	1128	1128	1128
50,no HD	1143	1143	1143	777	777	777	777	777	777	777
50, 170	1331	1331	1331	1100	1100	1100	1100	1100	1100	1100

50, 340	1744	1744	1744	1197	1197	1197	1197	1197	1197	1197
33, 250	2320	2320	2320	2056	2057	2057	2057	2057	2057	2057
33, 340	2513	2513	2513	2197	2198	2198	2198	2198	2198	2198
50, no HD	1221	1221	1221	917	917	917	917	917	917	917
50, 270	1664	1664	1664	1335	1335	1335	1335	1335	1335	1335
50, 540	1880	1880	1880	1423	1423	1423	1423	1423	1423	1423
33, 200				2001	2001	2001	2001	2001	2001	2001
33, 200				2198	2198	2198	2198	2198	2198	2198

Firm M	95:7	95:8	95:9	95:10	95:11	95:12
25, no HD	1559	1559	1559	1559	1559	1559
25,210HD	2229	2229	2229	2229	2229	2229
25, no HD, 2MB	787	787	787	787	787	787
25, no HD, 2MB	905	905	905	905	905	905
25,120 HD Bundl	1450	1450	1450	1450	1450	1450
33, no HD 2MB	1050	1050	1050	1050	1050	1050
33, no HD	1177	1177	1177	1177	1177	1177
33,120 bundl	1686	1686	1686	1686	1686	1686
33,210, 8MB	1814	1814	1814	1814	1814	1814
33, no HD, 4MB	1611	1611	1611	1611	1611	1611
33, 170, 8 MB	1939	1939	1939	1939	1939	1939
25, no HD, 2MB	893.25	893.25	893.25	893.25	893.25	893.25
25, 170, 4MB	1130	1130	1130	1130	1130	1130
25, 340, 8 MB	1611.5	1611.5	1611.5	1611.5	1611.5	1611.5
25, 120, 4MB	989.25	989.25	989.25	989.25	989.25	989.25
33, no HD, 2MB	826	826	826	826	826	826
33, 120, 4 MB	1037.5	1037.5	1037.5	1037.5	1037.5	1037.5
25, 80, 4MB	1569.5	1569.5	1569.5	1569.5	1569.5	1569.5
25, 170, 4MB	1488.75	1488.75	1488.75	1488.75	1488.75	1488.75
25, 170,4MB	2390.75	2390.75	2390.75	2390.75	2390.75	2390.75
25, 170, 4MB	2675	2675	2675	2675	2675	2675
25, 170 4MB	3719.25	3719.25	3719.25	3719.25	3719.25	3719.25
33, 170, 4MB	1587.75	1587.75	1587.75	1587.75	1587.75	1587.75
25, 120, 4MB	1434.5	1434.5	1434.5	1434.5	1434.5	1434.5
33,noHD,4MB	822	822	822	822	822	822
33, 170, 4MB	1104	1104	1104	1104	1104	1104
33, 270, 8MB	1242	1242	1242	1242	1242	1242
50, noHD, 4MB	850	850	850	850	850	850
50, 170,4MB	1009	1009	1009	1009	1009	1009
50,210,*MB	1556	1556	1556	1556	1556	1556
50,210,8MB	1412	1412	1412	1412	1412	1412
50,270,8MB	1289	1289	1289	1289	1289	1289
33,200	2199	2199	2199	2199	2199	2199
33,200	1572	1572	1572	1572	1572	1572
33,noHD,2MB	688	688	688	688	688	688
33,170,4MB	1022	1022	1022	1022	1022	1022
33,340,8MB	1153	1153	1153	1153	1153	1153
50CPU	1105	1105	1105	1105	1105	1105
50CPU	1236	1236	1236	1236	1236	1236
50CPU	1742	1742	1742	1742	1742	1742
50CPU	1522	1522	1522	1522	1522	1522
33CPU	1108	1108	1108	1108	1108	1108
33CPU	1128	1128	1128	1128	1128	1128
50,no HD	777	777	777	777	777	777
50, 170	1100	1100	1100	1100	1100	1100

50, 340	1197	1197	1197	1197	1197	1197
33, 250	2057	2057	2057	2057	2057	2057
33, 340	2198	2198	2198	2198	2198	2198
50, no HD	917	917	917	917	917	917
50, 270	1335	1335	1335	1335	1335	1335
50, 540	1423	1423	1423	1423	1423	1423
33, 200	2001	2001	2001	2001	2001	2001
33, 200	2199	2199	2199	2199	2199	2199

Firm O	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
33, 120										
33, 200										
33, 120										
33, 120										
33, 340										
33, 340										

Firm O	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
33, 120										1898
33, 200										1989
33, 120										2489
33, 120										2579
33, 340		1811	1811	1757	1757	1757	1374	1374	1374	1374
33, 340		2870	2870	2276	2276	2276	2022	2022	2022	2022

Firm O	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
33, 120	1941	1941	1941	1451	1451	1451	1451	1451	1451	1451
33, 200	1969	1969	1969	1520	1520	1520	1520	1520	1520	1520
33, 120	2489	2489	2489	1993	1993	1993	1993	1993	1993	1993
33, 120	2579	2579	2579	2169	2169	2084	2084	2084	2084	2084
33, 340	1374	1374	1374	1374	1374	1374	1374	1374	1374	1374
33, 340	2022	2022	2022	2022	2022	2022	2022	2022	2022	2022

Firm O	95:7	95:8	95:9	95:10	95:11	95:12
33, 120	1451	1451	1451	1451	1451	1451
33, 200	1520	1520	1520	1520	1520	1520
33, 120	1985	1985	1985	1985	1985	1985
33, 120	2084	2084	2084	2084	2084	2084
33, 340	1374	1374	1374	1374	1374	1374
33, 340	2022	2022	2022	2022	2022	2022

Firm P	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25, 120, 2MB			2391	2249	2249	2249	2176	2142	2142	1820
25, 120, 4MB			3417	3236	3236	3236	3349	3349	3349	3349
20, 80, 4MB			2391	2391	2391	2391	1978	1978	1978	1978
20, 120, 4MB			2562	2562	2562	2562	1958	2000	2000	2000
25, 120, 4MB			3759	3525	3525	3525	3114	2822.75	2822.75	2822.75
20, 200, 4MB							3433	3433	3433	3433
20, 200, 4MB							2302	2302	2302	2131
20, 80, 4MB								1590	1590	1598.25
20, 120, 4MB								1715	1715	1690
20, 200, 4MB								1986	1986	1937
20, 120, 4MB								2344	2344	2307
20, 200, 4MB								2595	2595	2554.75
33, 120, 4MB										
33, 120, 4MB										
33, 120										
33, 120, 4MB										
33, 200, 4MB										
33, 200, 4MB										
33, 250										

Firm P	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
25, 120, 2MB	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820
25, 120, 4MB	3349	3349	3349	3349	3349	3349	3349	3349	3349	3349
20, 80, 4MB	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978
20, 120, 4MB	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
25, 120, 4MB	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75
20, 200, 4MB	3433	3433	3433	3433	3433	3433	3433	3433	3433	3433
20, 200, 4MB	2131	2131	2131	2131	2131	2131	2131	2131	2131	2131
20, 80, 4MB	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25
20, 120, 4MB	1690	1690	1442.75	1442.75	1534	1534	1534	1534	1534	1534
20, 200, 4MB	1937	1937	1648.75	1649	1649	1667	1667	1667	1667	1667
20, 120, 4MB	2307	2307	2019.5	2019.75	2041.75	2064.75	2064.75	2064.75	2064.75	2064.75
20, 200, 4MB	2554.75	2554.75	2225.25	2225.75	2225.75	2250	2250	2250	2250	2250
33, 120, 4MB			2278.5	2278.5	2215	2240	2240	2240	2240	1696
33, 120, 4MB			3504.75	3504.75	3504.75	3504.75	3504.75	3504.75	3504.75	2744
33, 120				1534	1534	1534	1534	1534	1534	1534
33, 120, 4MB				2147	2147	2147	2147	2147	2147	2147
33, 200, 4MB				2366	2366	2366	2366	2366	2366	2011
33, 200, 4MB					1753	1753	1753	1753	1753	1467
33, 250										3351

Firm P	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
25, 120, 2MB	1820	1820	1820	1820	1820	1820	1820	1820	1820	1820
25, 120, 4MB	3349	3349	3349	3349	3349	3349	3349	3349	3349	3349
20, 80, 4MB	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978
20, 120, 4MB	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
25, 120, 4MB	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75
20, 200, 4MB	3433	3433	3433	3433	3433	3433	3433	3433	3433	3433
20, 200, 4MB	2131	2131	2131	2131	2131	2131	2131	2131	2131	2131
20, 80, 4MB	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25
20, 120, 4MB	1534	1534	1534	1534	1534	1534	1534	1534	1534	1534
20, 200, 4MB	1887	1887	1887	1887	1887	1887	1887	1887	1887	1887
20, 120, 4MB	2084.75	2084.75	2084.75	2084.75	2084.75	2084.75	2084.75	2084.75	2084.75	2084.75
20, 200, 4MB	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
33, 120, 4MB	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180
33, 120, 4MB	2337	2337	2337	2337	2007	2007	2007	2007	2007	2007
33, 120	1534	1534	1534	1534	1534	1534	1534	1534	1534	1534
33, 120, 4MB	2147	2147	2147	2147	2147	2147	2147	2147	2147	2147
33, 200, 4MB	2011	2011	2011	1780	1780	1780	1780	1780	1780	1780
33, 200, 4MB	1467	1467	1467	1299	1299	1299	1299	1299	1299	1299
33, 250	3488	3488	3488	2487	2190	2190	2190	2190	2190	2190

Firm P	95:7	95:8	95:9	95:10	95:11	95:12
25, 120, 2MB	1820	1820	1820	1820	1820	1820
25, 120, 4MB	3349	3349	3349	3349	3349	3349
20, 80, 4MB	1978	1978	1978	1978	1978	1978
20, 120, 4MB	2000	2000	2000	2000	2000	2000
25, 120, 4MB	2822.75	2822.75	2822.75	2822.75	2822.75	2822.75
20, 200, 4MB	3433	3433	3433	3433	3433	3433
20, 200, 4MB	2131	2131	2131	2131	2131	2131
20, 80, 4MB	1588.25	1588.25	1588.25	1588.25	1588.25	1588.25
20, 120, 4MB	1534	1534	1534	1534	1534	1534
20, 200, 4MB	1667	1667	1667	1667	1667	1667
20, 120, 4MB	2084.75	2084.75	2084.75	2084.75	2084.75	2084.75
20, 200, 4MB	2250	2250	2250	2250	2250	2250
33, 120, 4MB	1180	1180	1180	1180	1180	1180
33, 120, 4MB	2007	2007	2007	2007	2007	2007
33, 120	1534	1534	1534	1534	1534	1534
33, 120, 4MB	2147	2147	2147	2147	2147	2147
33, 200, 4MB	1780	1780	1780	1780	1780	1780
33, 200, 4MB	1299	1299	1299	1299	1299	1299
33, 250	2190	2190	2190	2190	2190	2190

Firm U	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
240, 2MB			6094	6094	6094	6094	6094	6094	6094	6094
120, 2MB			3926	3926	3926	3926	3926	3926	3926	3926
25, 120			1639	1639	1639	1639	1639	1639	1639	1639
25, no HD			1359	1359	1359	1359	1359	1359	1359	1359
25, 170			1299	1299	1299	1299	1171	1171	1171	1171
25, 170			1631	1631	1631	1631	1631	1631	1631	1631
25, 170										963.5
33, 210										1201.75
25, no HD										848.75
25, 170										1010
25, 170										
33, 250										
33, no HD										
33, 170										
33, no HD										
33, 270										
33, 270										
33, 210										
33, 210										
33, 210										
50, 280										

Firm U	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
240, 2MB	6094	6094	6094	6094	6094	6094	6094	6094	6094	6094
120, 2MB	3926	3926	3926	3926	3926	3926	3926	3926	3926	3926
25, 120	1639	1639	1639	1639	1639	1639	1639	1639	1639	1639
25, no HD	1359	1359	1359	1359	1359	1359	1359	1359	1359	1359
25, 170	1171	1171	1171	1171	1171	1171	1171	1171	1171	1171
25, 170	1631	1631	1631	1631	1631	1631	1631	1631	1631	1631
25, 170	998.5	998.5	998.5	1021.25	1021.25	993.75	993.75	993.75	993.75	993.75
33, 210	1201.75	1201.75	1201.75	1228.75	1257.75	1194.75	1194.75	1194.75	1194.75	1194.75
25, no HD	848.75	848.75	848.75	848.75	848.75	848.75	848.75	848.75	848.75	848.75
25, 170	1010	1010	1010	1022	1022	1022	1022	1022	1022	1022
25, 170			1441.25	1434	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5
33, 250			1824	1824	1815.5	1708.25	1708.25	1708.25	1708.25	1438
33, no HD					912.25	912.25	912.25	912.25	912.25	912.25
33, 170					1104.75	1104.75	1104.75	1104.75	1104.75	1104.75
33, no HD										887.75
33, 270										1102
33, 270										1038
33, 210										
33, 210										
33, 210										
50, 280										

Firm U	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
240, 2MB	6094	6094	6094	6094	6094	6094	6094	6094	6094	6094
120, 2MB	3926	3926	3926	3926	3926	3926	3926	3926	3926	3926
25, 120	1639	1639	1639	1639	1639	1639	1639	1639	1639	1639
25, no HD	1359	1359	1359	1359	1359	1359	1359	1359	1359	1359
25, 170	1171	1171	1171	1171	1171	1171	1171	1171	1171	1171
25, 170	1631	1631	1631	1631	1631	1631	1631	1631	1631	1631
25, 170	993.75	993.75	993.75	993.75	993.75	993.75	993.75	993.75	993.75	993.75
33, 210	1194.75	1194.75	1194.75	1194.75	1194.75	1194.75	1194.75	1194.75	1194.75	1194.75
25, no HD	848.75	848.75	848.75	848.75	848.75	848.75	848.75	848.75	848.75	848.75
25, 170	1022	1022	1022	1022	1022	1022	1022	1022	1022	1022
25, 170	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5
33, 250	1438	1438	1438	1438	1438	1438	1438	1438	1438	1438
33, no HD	912.25	912.25	912.25	912.25	912.25	912.25	912.25	912.25	912.25	912.25
33, 170	1104.75	1104.75	1104.75	1104.75	1104.75	1104.75	1104.75	1104.75	1104.75	1104.75
33, no HD	900	900	900	826	827	827	827	827	827	827
33, 270	1127	1127	1127	1034	1036	1036	1036	1036	1036	1036
33, 270	1338	1338	1338	1294	1294	1296	1296	1296	1296	1296
33, 210				1683	1216	1216	1216	1216	1216	1216
33, 210				1870	1402	1402	1402	1402	1403	1403
33, 210				2805	2151	2151	2151	2151	2151	2151
50, 200				3272	2338	2338	2338	2338	2338	2338

Firm U	95:7	95:8	95:9	95:10	95:11	95:12
240, 2MB	8094	8094	8094	8094	8094	8094
120, 2MB	3928	3928	3928	3928	3928	3928
25, 120	1839	1839	1839	1839	1839	1839
25, no HD	1359	1359	1359	1359	1359	1359
25, 170	1171	1171	1171	1171	1171	1171
25, 170	1831	1831	1831	1831	1831	1831
25, 170	993.75	993.75	993.75	993.75	993.75	993.75
33, 210	1194.75	1194.75	1194.75	1194.75	1194.75	1194.75
25, no HD	848.75	848.75	848.75	848.75	848.75	848.75
25, 170	1022	1022	1022	1022	1022	1022
25, 170	1362.5	1362.5	1362.5	1362.5	1362.5	1362.5
33, 250	1438	1438	1438	1438	1438	1438
33, no HD	912.25	912.25	912.25	912.25	912.25	912.25
33, 170	1104.75	1104.75	1104.75	1104.75	1104.75	1104.75
33, no HD	827	827	827	827	827	827
33, 270	1035	1035	1035	1035	1035	1035
33, 270	1296	1296	1296	1296	1296	1296
33, 210	1216	1216	1216	1216	1216	1216
33, 210	1403	1403	1403	1403	1403	1403
33, 210	2151	2151	2151	2151	2151	2151
50, 260	2338	2338	2338	2338	2338	2338

Firm V	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
25, no HD										
25, 100										
25, 200										
25, no HD										
25, 100										
25, 200										
25, no HD										
25, 120										
25, 240										
25, 340										
33, no HD										
33, 120										
33, 240										
33, 340										
25, 120										
33, 200										
33, no HD										
33, 270										
33, 340										
33S										
33, noHD										
33, 170										
33, 170										
33, 270										
25M										
25M										
25, 120										
25, 240										
33, no HD										
33, 120										
33, 240										
33, 340										
25, 64M										
25S										
33C										
33C										
33, no HD										
33, 100										
33, 200										
33, no HD										
33, 100										
33, 200										
33, no HD										
33, no HD										
33, 200										
33S										
33S										

50, no HD

508

508

33, 270

33, 270

33, 420

50, 270

50, 420

338

25, 170

33, 170

33, 250

Firm V	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
25, no HD			1083.25	1083.25	1088	991.5	780.75	780.75	780.75	992
25, 100			1287.25	1287.25	1248.75	1175.25	956	956	956	1176
25, 200			1359	1359	1337.25	1287.25	1058.25	1058.25	1058.25	1288
25, no HD			1285.5	1285.5	1284.75	1183.75	1190	1190	1190	992
25, 100			1489.25	1489.25	1445.75	1377.5	872.5	872.5	872.5	1176
25, 200			1561.25	1561.25	1538.25	1489.25	1058.25	1058.25	1058.25	1288
25, no HD			780.25	780.75	780.75	780.75	1193.75	1193.75	1193.75	1193.75
25, 120			975	956	956	956	1285.5	1285.5	1285.5	1285.5
25, 240			1058.25	1058.25	1058.25	1058.25	1377.5	1377.5	1377.5	1057
25, 340			1194.75	1194.75	1190	1190	1515.75	1515.75	1515.75	1515.75
33, no HD			882	872.5	872.5	872.5	1004.5	1004.5	1004.5	1004.5
33, 120			1058.25	1058.25	1058.25	1058.25	1323.25	1323.25	1323.25	1323.25
33, 240			1193.75	1193.75	1193.75	1193.75	1414.25	1414.25	1414.25	1149
33, 340			1285.5	1302.5	1285.5	1285.5	1791.5	1791.5	1791.5	1195
25, 120			1377.5	1377.5	1377.5	1377.5	1148.25	1148.25	1148.25	1378.5
33, 200			1515.75	1515.75	1515.75	1515.75	1421	1421	1421	1421
33, no HD			1009	1009	1004.5	1004.5	1515.75	1515.75	1515.75	985
33, 270			1332	1332	1323.25	1323.25	1323.25	1323.25	1323.25	1224
33, 340			1424	1424	1414.25	1414.25	1414.25	1414.25	1414.25	1287
33S			1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1791.5	1808
33, no HD			1148.25	1148.25	1148.25	1148.25	1148.25	1148.25	1148.25	1149
33, 170			1424	1421	1421	1421	1421	1421	1421	1379
33, 170			1515.75	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75	1471
33, 270			1515.75	1515.75	1514	1514	1514	1514	1514	1471
25M			1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25
25M			1645.5	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5
25, 120			1883.25	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25
25, 240			2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5
33, no HD			1508.25	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25
33, 120			1975.25	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25
33, 240			2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5
33, 340			2800	2800	2800	2800	2800	2800	2800	2800
25, 84M					1388.75	1285.5	1285.5	1285.5	1285.5	972
25S					1880	1581.25	1581.25	1581.25	1581.25	1378
33C					2148	2020.75	2020.75	2020.75	2020.75	1929
33C					2441.5	2298.25	2298.25	2298.25	2298.25	2204.5
33, no HD						1083.25	1083.25	1083.25	1083.25	1084
33, 100						1287.25	1287.25	1287.25	1287.25	1288
33, 200						1374	1374	1374	1374	1359
33, no HD						1299.5	1299.5	1299.5	1299.5	1288
33, 100						1485.25	1485.25	1485.25	1485.25	1470
33, 200						1578.25	1578.25	1578.25	1578.25	1582
33, no HD						1608.75	1608.75	1608.75	1608.75	1590
33, no HD										873
33, 200										1057
33S										1195
338										1471

50, no HD

50S

50S

33, 270

33, 270

33, 420

50, 270

50, 420

33S

25, 170

33, 170

33, 250

1011

1190

1379

Firm V	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
25, no HD	992	992	992	1019	1019	1019	1019	1019	1019	1019
25, 100	1176	1176	1176	1195	1195	1195	1195	1195	1195	1195
25, 200	1268	1268	1268	1288	1288	1288	1288	1288	1288	1288
25, no HD	992	992	992	1214	1214	1214	1214	1214	1214	1214
25, 100	1176	1176	1176	1400	1400	1400	1400	1400	1400	1400
25, 200	1268	1268	1268	1494	1494	1494	1494	1494	1494	1494
25, no HD	1193.75	1193.75	1193.75	1193.75	1193.75	1193.75	1193.75	1193.75	1193.75	1193.75
25, 120	985	985	985	992	992	992	992	992	992	992
25, 240	1057	1057	1088	1088	1088	1088	1088	1088	1088	1088
25, 340	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75
33, no HD	1004.5	1004.5	1004.5	1004.5	1004.5	1004.5	1004.5	1004.5	1004.5	1004.5
33, 120	1323.25	1323.25	1323.25	1323.25	1323.25	1323.25	1323.25	1323.25	1323.25	1323.25
33, 240	1149	1149	1149	1168	1168	1168	1168	1168	1168	1168
33, 340	1195	1195	1195	1215	1215	1215	1215	1215	1215	1215
25, 120	1378.5	1378.5	1378.5	1400	1400	1400	1400	1400	1400	1400
33, 200	1516	1516	1516	1541	1541	1541	1541	1541	1541	1541
33, no HD	985	985	985	887	887	887	887	887	827	827
33, 270	1224	1224	1138	1138	1138	1138	1138	1138	1063	1063
33, 340	1287	1287	1287	1287	1287	1287	1287	1287	1287	1287
33S	1608	1608	1608	1465	1465	1465	1465	1465	1270	1270
33, noHD	1149	1149	1149	1010	1010	1010	1010	1010	945	945
33, 170	1379	1379	1379	1186	1186	1186	1186	1186	1186	1186
33, 170	1471	1471	1471	1280	1280	1280	1280	1280	1238	1238
33, 270	1471	1471	1471	1280	1280	1280	1280	1280	1215	1215
25M	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25
25M	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5
25, 120	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25
25, 240	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5
33, no HD	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25	1508.25
33, 120	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25
33, 240	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5
33, 340	2800	2800	2800	2800	2800	2800	2800	2800	2800	2800
25, 84M	972	972	972	972	972	972	972	972	972	972
25S	1378	1378	1378	1378	1378	1378	1378	1378	1378	1378
33C	1929	1929	1929	1929	1929	1929	1929	1929	1929	1929
33C	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5
33, no HD	1084	1084	1084	1102	1102	1102	1102	1102	1102	1102
33, 100	1268	1268	1268	1268	1268	1268	1268	1268	1268	1268
33, 200	1359	1359	1359	1382	1382	1382	1382	1382	1382	1382
33, no HD	1268	1268	1268	1307	1307	1307	1307	1307	1307	1307
33, 100	1470	1470	1470	1494	1494	1494	1494	1494	1494	1494
33, 200	1562	1562	1562	1587	1587	1587	1587	1587	1587	1587
33, no HD	1590	1590	1590	1616	1286	1286	1286	1286	1286	1286
33, no HD	873	873	873	819	819	819	819	819	819	819
33, 200	1057	1057	1057	1057	1057	1057	1057	1057	1057	1057
33S	1195	1195	1195	1078	1078	1078	1078	1078	1078	1078
33S	1471	1471	1471	1270	1270	1270	1270	1270	1270	1270

50, no HD	1011	1011	1011	937	937	937	937	937	847	847
50S	1190	1190	1190	1190	1190	1190	1190	1190	1190	1190
50S	1379	1379	1379	1379	1379	1379	1379	1379	1379	1379
33, 270				1039	1039	1039	1039	1039	1039	994
33, 270				1325	1325	1325	1325	1325	1325	1325
33, 420				1121	1121	1121	1121	1121	1121	1121
50, 270				1144	1144	1144	1144	1144	1087	1087
50, 420				1254	1254	1254	1254	1254	1149	1149
338				1185	1185	1185	1185	1185	1121	1121
25, 170				1120	1120	1120	1120	1120	1120	1120
33, 170				1681	1681	1681	1681	1681	1494	1494
33, 250				1868	1868	1868	1868	1868	1681	1681

Firm V	95:7	95:8	95:9	95:10	95:11	95:12
25, no HD	1019	1019	1019	1019	1019	1019
25, 100	1195	1195	1195	1195	1195	1195
25, 200	1288	1288	1288	1288	1288	1288
25, no HD	1214	1214	1214	1214	1214	1214
25, 100	1400	1400	1400	1400	1400	1400
25, 200	1494	1494	1494	1494	1494	1494
25, no HD	1193.75	1193.75	1193.75	1193.75	1193.75	1193.75
25, 120	992	992	992	992	992	992
25, 240	1086	1086	1086	1086	1086	1086
25, 340	1515.75	1515.75	1515.75	1515.75	1515.75	1515.75
33, no HD	1004.5	1004.5	1004.5	1004.5	1004.5	1004.5
33, 120	1323.25	1323.25	1323.25	1323.25	1323.25	1323.25
33, 240	1168	1168	1168	1168	1168	1168
33, 340	1215	1215	1215	1215	1215	1215
25, 120	1400	1400	1400	1400	1400	1400
33, 200	1541	1541	1541	1541	1541	1541
33, no HD	827	827	827	827	827	827
33, 270	1063	1063	1063	1063	1063	1063
33, 340	1267	1267	1267	1267	1267	1267
33S	1270	1270	1270	1270	1270	1270
33, noHD	945	945	945	945	945	945
33, 170	1169	1169	1169	1169	1169	1169
33, 170	1238	1238	1238	1238	1238	1238
33, 270	1215	1215	1215	1215	1215	1215
25M	1416.25	1416.25	1416.25	1416.25	1416.25	1416.25
25M	1645.5	1645.5	1645.5	1645.5	1645.5	1645.5
25, 120	1883.25	1883.25	1883.25	1883.25	1883.25	1883.25
25, 240	2112.5	2112.5	2112.5	2112.5	2112.5	2112.5
33, no HD	1506.25	1506.25	1506.25	1506.25	1506.25	1506.25
33, 120	1975.25	1975.25	1975.25	1975.25	1975.25	1975.25
33, 240	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5
33, 340	2800	2800	2800	2800	2800	2800
25, 84M	972	972	972	972	972	972
26S	1378	1378	1378	1378	1378	1378
33C	1929	1929	1929	1929	1929	1929
33C	2204.5	2204.5	2204.5	2204.5	2204.5	2204.5
33, no HD	1102	1102	1102	1102	1102	1102
33, 100	1288	1288	1288	1288	1288	1288
33, 200	1382	1382	1382	1382	1382	1382
33, no HD	1307	1307	1307	1307	1307	1307
33, 100	1494	1494	1494	1494	1494	1494
33, 200	1587	1587	1587	1587	1587	1587
33, no HD	1286	1286	1286	1286	1286	1286
33, no HD	819	819	819	819	819	819
33, 200	1057	1057	1057	1057	1057	1057
33S	1078	1078	1078	1078	1078	1078
33S	1270	1270	1270	1270	1270	1270

50, no HD	847	847	847	847	847	847
50S	1190	1190	1190	1190	1190	1190
50S	1379	1379	1379	1379	1379	1379
33, 270	994	994	994	994	994	994
33, 270	1325	1325	1325	1325	1325	1325
33, 420	1121	1121	1121	1121	1121	1121
50, 270	1067	1067	1067	1067	1067	1067
50, 420	1149	1149	1149	1149	1149	1149
33S	1121	1121	1121	1121	1121	1121
25, 170	1120	1120	1120	1120	1120	1120
33, 170	1494	1494	1494	1494	1494	1494
33, 250	1661	1661	1661	1661	1661	1661

Firm X	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
33, 340										
33, 179										
33, no HD										
33, 270										
33, 540										
50, no HD										
50, 270										
50, 540										
50, 270										
50, no HD										
50, 270										
50, 540										
33, 120										
33, 240										
33, 170										
33, 240										
33, 240, 4										
50, 540										
50, 540										
33, 170										
33, no HD										
50, 540										
33, 340										
50, 170										
50, 340										
50, 340										
50, 170										
50, 340										
50, 340										
25, no HD										
25, 170										
25, 340										
25, 120										
25, 170										
25, 120										
25, 170										
33, 170										

Firm X	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
33, 340										1344
33, 179										1019
33, no HD										
33, 270										
33, 540										
50, no HD										
50, 270										
50, 540										
50, 270										
50, no HD										
50, 270										
50, 540										
33, 120										
33, 240										
33, 170										
33, 240										
33, 240, 4							1848	1848	1848	1848
50, 540							1210	1210	1210	1210
50, 540							1210	1210	1210	1210
33, 170										
33, no HD										
50, 540										
33, 340										
50, 170										
50, 340										
50, 340										
50, 170										
50, 340										1502
50, 340										1968
25, no HD			575	575	575	575	575	575	575	575
25, 170			1036.75	1036.75	1036.75	1036.75	1036.75	1036.75	1036.75	991
25, 340			1372	1372	1372	1372	1372	1372	1372	1337.5
25, 120			1833.75	1833.75	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5
25, 170			1978.5	1978.5	1737	1737	1737	1737	1737	1737
25, 120			2509.5	2509.5	2266	2266	2266	2266	2266	2266
25, 170			2954.25	2954.25	2413	2413	2413	2413	2413	2413
33, 170				1055	1066.5	1066.5	1066.5	1066.5	1066.5	1062

Firm X	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
33, 340	1378	1378	1378	1378	1378	1378	1378	1378	1378	1378
33, 179	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046
33, no HD				882	882	903	903	903	504	504
33, 270				1023	1023	1023	1023	1023	1023	1023
33, 540				1387	1387	1387	1387	1387	1418	1418
50, no HD				900	902	912	912	912	873	873
50, 270				1042	1042	1064	1064	1064	1025	1014
50, 540				1404	1404	1435	1435	1435	1400	1370
50, 270				1404	1404	1435	1435	1435	1105	1105
50, no HD				995	998	1021	1021	1021	1021	987
50, 270				1127	1127	1153	1153	1153	1153	1115
50, 540				1498	1498	1532	1532	1532	1534	1484
33, 120				1589	1589	1607	1607	1607	1607	1607
33, 240				2337	2337	2361	2361	2361	1847	1847
33, 170				1983	1983	2007	2007	2007	2007	1940
33, 240				2709	2709	2771	2771	2771	2771	2678
33, 240, 4	1846	1846	1846	1846	1846	1846	1846	1846	1846	1846
50, 540	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210
50, 540	1210	1210	1210	1210	1210	1210	1210	1210	1210	1210
33, 170									1358	1358
33, no HD										873
50, 540										1370
33, 340										
50, 170										
50, 340										
50, 340										
50, 170										
50, 340	1541	1541	1541	1541	1541	1541	1541	1541	1541	1541
50, 340	2039	2039	2039	2039	2039	2039	2039	2039	2039	2039
25, no HD	575	575	575	575	575	575	575	575	575	575
25, 170	998	998	998	998	998	998	998	998	998	998
25, 340	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5
25, 120	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5
25, 170	1737	1737	1737	1737	1737	1737	1737	1737	1737	1737
25, 120	2268	2268	2268	2268	2268	2268	2268	2268	2268	2268
25, 170	2413	2413	2413	2413	2413	2413	2413	2413	2413	2413
33, 170	1062	1062	1062	1062	1062	1062	1062	1062	1062	1062

Film X	95:7	95:8	95:9	95:10	95:11	95:12
33, 340	1378	1378	1378	1378	1378	1378
33, 179	1046	1046	1046	1046	1046	1046
33, no HD	504	504	504	504	504	504
33, 270	1023	1023	1023	1023	1023	1023
33, 540	1418	1418	1418	1418	1418	1418
50, no HD	873	873	873	873	873	873
50, 270	1014	1014	1014	1014	1014	1014
50, 540	1370	1370	1370	1370	1370	1370
50, 270	1105	1105	1105	1105	1105	1105
50, no HD	987	987	987	987	987	987
50, 270	1115	1115	1115	1115	1115	1115
50, 540	1484	1484	1484	1484	1484	1484
33, 120	1607	1607	1607	1607	1607	1607
33, 240	1847	1847	1847	1847	1847	1847
33, 170	1940	1940	1940	1940	1940	1940
33, 240	2678	2678	2678	2678	2678	2678
33, 240, 4	1846	1846	1846	1846	1846	1846
50, 540	1210	1210	1210	1210	1210	1210
50, 540	1210	1210	1210	1210	1210	1210
33, 170	1358	1358	1358	1358	1358	1358
33, no HD	873	873	873	873	873	873
50, 540	1370	1370	1370	1370	1370	1370
33, 340		1362	1366	1366	1366	1366
50, 170		1148	1181	1181	1181	1181
50, 340		1484	1522	1522	1522	1522
50, 340		1989	2019	2019	2019	2019
50, 170		1186	1186	1186	1186	1186
50, 340	1541	1541	1541	1541	1541	1541
50, 340	2039	2039	2039	2039	2039	2039
25, no HD	575	575	575	575	575	575
25, 170	906	906	906	906	906	906
25, 340	1337.5	1337.5	1337.5	1337.5	1337.5	1337.5
25, 120	1640.5	1640.5	1640.5	1640.5	1640.5	1640.5
25, 170	1737	1737	1737	1737	1737	1737
25, 120	2286	2286	2286	2286	2286	2286
25, 170	2413	2413	2413	2413	2413	2413
33, 170	1062	1062	1062	1062	1062	1062

Firm Y	93:1	93:2	93:3	93:4	93:5	93:6	93:7	93:8	93:9	93:10
33, 210										
50, 210										
33, 210										
50, 270										
33, 210										
50, 270										
50, 270										
33, no HD										
33, 340										
50, no HD										
50, 340										
33, no HD										
33, 340										
33, 270										
33, 540										
50, no HD										
33, no HD										
33, 340										
33, 210										
33, no HD										
33, 210										
33, 240										
33, 210										

Firm Y	93:11	93:12	94:1	94:2	94:3	94:4	94:5	94:6	94:7	94:8
33, 210										
50, 210										
33, 210										
50, 270										
33, 210										
50, 270										
50, 270										
33, no HD										
33, 340										
50, no HD										
50, 340										
33, no HD										
33, 340										
33, 270										
33, 540										
50, no HD										
33, no HD										
33, 340										
33, 210										
33, no HD										
33, 210										
33, 240										
33, 210										

Firm Y	94:9	94:10	94:11	94:12	95:1	95:2	95:3	95:4	95:5	95:6
33, 210				995	995	990	990	990	990	990
50, 210						995	995	995	990	990
33, 210				1031	1031	1031	1031	1031	1031	1031
50, 270				1318	1230	1230	1230	1230	1195	1195
33, 210				1257	1213	1213	1213	1213	1213	1213
50, 270				1477	1283	1283	1283	1283	1283	1283
50, 270				1547	1327	1327	1327	1327	1327	1327
33, no HD				782	784	784	784	784	784	784
33, 340				1084	1031	1031	1031	1031	1031	1031
50, no HD									773	773
50, 340									1004	1004
33, no HD				826	826	826	826	826	826	826
33, 340					1084	1084	1084	1084	1084	1084
33, 270				1239	1195	1195	1195	1195	1195	1195
33, 540				1408	1301	1301	1301	1301	1301	1301
50, no HD									835	835
33, no HD				1093	1031	1031	1031	1031	1031	1031
33, 340				1389	1283	1283	1283	1283	1283	1283
33, 210				1310	1286	1286	1286	1286	1286	1286
33, no HD				1160	1075	1075	1075	1075	1075	1075
33, 210				1327	1257	1257	1257	1257	1257	1257
33, 240				1459	1327	1327	1327	1327	1327	1327
33, 210				1389	1310	1310	1310	1310	1310	1310

Firm Y	95:7	95:8	95:9	95:10	95:11	95:12
33, 210	980	980	980	980	980	980
50, 210	980	980	980	980	980	980
33, 210	1031	1031	1031	1031	1031	1031
50, 270	1195	1195	1195	1195	1195	1195
33, 210	1213	1213	1213	1213	1213	1213
50, 270	1283	1283	1283	1283	1283	1283
50, 270	1327	1327	1327	1327	1327	1327
33, no HD	784	784	784	784	784	784
33, 340	1031	1031	1031	1031	1031	1031
50, no HD	773	773	773	773	773	773
50, 340	1004	1004	1004	1004	1004	1004
33, no HD	828	828	828	828	828	828
33, 340	1084	1084	1084	1084	1084	1084
33, 270	1195	1195	1195	1195	1195	1195
33, 540	1301	1301	1301	1301	1301	1301
50, no HD	835	835	835	835	835	835
33, no HD	1031	1031	1031	1031	1031	1031
33, 340	1283	1283	1283	1283	1283	1283
33, 210	1288	1288	1288	1288	1288	1288
33, no HD	1075	1075	1075	1075	1075	1075
33, 210	1257	1257	1257	1257	1257	1257
33, 240	1327	1327	1327	1327	1327	1327
33, 210	1310	1310	1310	1310	1310	1310

APPENDIX B
COLORADO WINE MARKET DATA

The sources for these data are mentioned in the text and bibliography and were compiled in 1997. Specific questions concerning these data may be obtained from the author. I can probably be traced quite simply by contacting the *American Economic Association*, the *Department of Economics, University of Tennessee*, the *Center for Business and Economic Research at the University of Tennessee*, or the *Alumni Office, Virginia Military Institute*. I recommend contacting me prior to attempting to test these data, since I will very shortly be willing to share them on an electronic format. What follows are the raw variables and price change data from which I generated the frequency of price adjustment data tested in the text of this dissertation. Data descriptions, sources and scale of the data appear in the text. The data are the raw observations only, all other variables may be calculated from these data.

The firms are listed anonymously by letter. Firms F & H should be treated as a single firm (H). This was done randomly, the letters corresponding to the notebook letter in the spreadsheet program I used to record and process the data. Since the data is quasi-proprietary, I cannot list the firms with the data.

Raw Data, The Colorado Wine Market

	E	D	C	G	H	B
NEMP	74	99	50	29	188	19
VEH	49	55	50	9	29	9
SALES	79	75	40	5	100	10
TOTALPL	22	11	18	13	19	12
SALESREP	69	65	31	47	45	44
PHONE	45	58	47	52	109	64
PL	327	253	206	374	982	206

Firm B	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Ingenook, White Zinfandel, 5L	48	51	51	51	51	51	51	51	51	51	51
Ingenook, Blush, Rhine, 5L	37.5	39	39	39	39	39	45	45	45	45	39
Ingenook, Chablis, White Grenache, 5L	37.5	37.5	37.5	37.5	37.5	37.5	54	54	54	54	54
Ingenook Estate Cellars, Cab Sauv, 1.5L	41	45	45	45	45	45	62	62	62	62	62
Ingenook Estate Cellars, Cab Sauv 750ML	53	54	54	54	54	54	54	54	54	54	54
Ingenook Estate Cellars, Chardonnay, 1.5L	41	45	45	45	45	45	45	45	45	45	45
Ingenook Estate Cellars Chardonnay, 750ML	50	54	54	54	54	54	54	54	54	54	54
Ingenook Estate Cellars, White Zin 1.5L	41	45	45	45	45	45	46.75	46.75	46.75	46.8	46.75
Ingenook Estate Cellars, White Zin 750ML	50	54	54	54	54	54	54	54	54	54	54
Ingenook Estate Cellars, Merlot, 1.5L	41	45	45	45	45	45	36	36	36	36	36
Ingenook Estate Cellars, Gamay Beaujolais, 1.5L	41	54	54	54	54	54	54	54	54	54	45
Ingenook Estate Cellars, Sauvignon Blanc, 1.5L	41	54	54	54	54	54	54	54	54	54	45
Ingenook Estate Cellars, Zinfandel, 1.5L	41	45	45	45	45	45	45	45	45	45	45
Ingenook Estate Cellars, Zin 750ML	41	54	54	54	54	54	54	54	54	54	45
Ingenook Premium Select, Chenin Blanc 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Select, Chenin Blanc 1.5L	40	40	40	40	40	40	40	40	40	40	40
Ingenook Premium Select, Chenin Blanc 750ML	32.5	34	34	34	34	34	34	34	34	34	34
Ingenook Premium Fench Colombard, 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Fench Colombard, 1.5L	40	40	40	40	40	40	40	40	40	40	40

Inglennook Premium Fench Colombard, 750ML	32.5	34	34	34	34	34	34	34	34	34	34
Inglennook Premium Select, White Grenache 3L	41	43	43	43	43	43	43	43	43	43	43
Inglennook Premium Select, White Grenache 1.5L	40	40	40	40	40	40	40	40	40	40	40
Inglennook Premium Select, White Grenache 750ML	32.5	34	34	34	34	34	34	34	34	34	34
Inglennook Premium Select, Reisling, 3L	41	43	43	43	43	43	43	43	43	43	43
Inglennook Premium Select, Reisling, 3L	40	40	40	40	40	40	40	40	40	40	40
Inglennook Premium Select, Reisling, 3L	31.5	34	34	34	34	34	34	34	34	34	34
Inglennook Premium Select White Zin, 3L	44.25	48	48	48	48	48	48	48	48	48	48
Inglennook Premium Select White Zin, 1.5L	44.75	45	45	45	45	45	45	45	45	45	45
Inglennook Premium Select White Zin, 750ML	32.25	54	54	54	54	54	54	54	54	54	54
Inglennook Premium Select Cabernet, 3L	44.25	48	48	48	48	48	58	58	58	58	58
Inglennook Premium Select Cabernet, 1.5	44.75	45	45	45	45	45	46.75	46.75	46.75	46.8	46.75
Inglennook Premium Select Cabernet, 750ML	32.25	54	54	54	54	54	54	54	54	54	54
Inglennook Premium Select, Burgundy, 3L	41	48	48	48	43	43	43	43	43	43	46.75
Inglennook Premium Select, Burgundy, 1.5L	40	45	45	45	45	45	40	40	40	40	40
Inglennook Premium Select, Burgundy, 750ML	32.55	54	54	54	54	54	34	34	34	34	34
Inglennook Premium Select Cabernet Rhine, 3L	44.25	48	48	48	48	48	43	43	43	43	43

Ingenook Premium Select Cabernet, 1.5L	44.75	45	45	45	45	45	46.75	46.75	46.75	46.8	46.75
Ingenook Premium Select Cabernet, 750ML	32.25	54	54	54	54	54	54	54	54	54	54
Ingenook Premium select Chardonnay, 3L	44.25	48	48	48	48	48	58	58	58	58	58
Ingenook Premium select Chardonnay, 1.5L	44.75	45	45	45	45	45	46.75	46.75	46.75	46.8	46.75
Ingenook Premium select Chardonnay, 750ML	32.25	54	54	54	54	54	54	54	54	54	54
Ingenook Premium Select, Burgundy, 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Select, Burgundy, 1.5L	40	40	40	40	40	40	40	40	40	40	40
Ingenook Premium Select, Burgundy, 750ML	32.25	34	34	34	34	34	34	34	34	34	34
Ingenook Premium Select Chablis, 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Select Chablis, 1.5L	40	40	40	40	40	40	40	40	40	40	40
Ingenook Premium Select Chablis, 750ML	32.25	34	34	34	34	34	34	34	34	34	34
Ingenook Premium Select Rhine, 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Select Rhine, 1.5L	40	40	40	40	40	40	40	40	40	40	40
Ingenook Premium Select Rhine, 750L	32.25	34	34	34	34	34	34	34	34	34	34
Ingenook Premium Select Vin Rose, 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Select Vin Rose, 1.5L	40	40	40	40	40	40	40	40	40	40	40
Ingenook Premium Select Vin Rose, 750ML	32.25	34	34	34	34	34	34	34	34	34	34

Ingenook Premium Select California Blush, 3L	41	43	43	43	43	43	43	43	43	43	43
Ingenook Premium Select California Blush, 1.5L	40	40	40	40	40	40	40	40	40	40	40
Ingenook Premium Select California Blush, 750ML	32.25	34	34	34	34	34	34	34	34	34	34
Ingenook Restaurant Package, Burgundy 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Restaurant Package, Burgundy 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Restaurant Package, Chablis 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Restaurant Package, White Grenache 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Restaurant Package, Rose 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Restaurant Package, French Colombard 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Restaurant Package, California Blush 4L	35.75	35.8	35.8	35.8	35.75	35.75	35.75	35.75	35.75	35.8	35.75
Ingenook Kegs Chablis, 58L	97.25	105	105	105	105	105	105	105	105	105	105
Ingenook Kegs Vin Rose, 58L	97.25	105	105	105	105	105	105	105	105	105	105
Ingenook Kegs Blush, 58L	97.25	105	105	105	105	105	105	105	105	105	105
Ingenook Kegs Burgundy, 58L	97.25	105	105	105	105	105	105	105	105	105	105
Ingenook Kegs Chablis, 30L	56	63	63	63	63	63	63	63	63	63	63
Ingenook Kegs Blush, 30L	56	63	63	63	63	63	63	63	63	63	63
Ingenook Kegs Burgundy, 30L	56	63	63	63	63	63	63	63	63	63	63
Ingenook Keg, White Zin, 30L	93.25	100	100	100	100	100	100	100	100	100	100
Ingenook Wine Cases, Blanc De Blanc 18 L	35.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Ingenook Wine Cases, Burgundy 18 L	35.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5

Ingenook Wine Cask, Chablis 18 L	35.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Ingenook Wine Cask, Vin Rosa 18 L	35.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Ingenook Wine Cask, California Blush 18 L	35.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Ingenook Wine Cask, French Col 18 L	35.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Ingenook Wine Cask, White Zin 18 L	66.75	70	70	70	70	70	70	70	70	70	70	70
Ingenook Wine Cask, Chardonnay 18 L	77.75	79	79	79	79	79	79	79	79	79	79	79
Nathanson Creek Cab Sav 1.5 L	39	39	39	39	39	39	39	39	39	39	39	39
Nathanson Creek Cab Sav 750ML	47	47	47	47	47	47	47	47	47	47	47	47
Nathanson Creek Chardonnay 1.5L	39	39	39	39	39	39	39	39	39	39	39	39
Nathanson Creek 750ML	47	47	47	47	47	47	47	47	47	47	47	47
Nathanson Creek White Zin 1.5L	36	36	36	36	36	36	36	36	36	36	36	36
Nathanson Creek White Zin 750ML	44	44	44	44	44	44	44	44	44	44	44	44
Sullivan Vineyards, Cab Sav 750ML	218.5	221	221	221	220.5	220.5	220.5	220.5	220.5	221	220.5	220.5
Sullivan Vineyards, Merlot 750ML	218.5	221	221	221	220.5	220.5	220.5	220.5	220.5	221	220.5	220.5
Sullivan Vineyards, Cuvée de Vigne, 750ML	239.3	239	239	239	239.3	239.3	239.3	239.3	239.3	239	239.3	239.3
Joullien Cab Sav 750ML	125	134	134	134	134	134	134	134	134	134	134	134
Joullien Chardonnay 750ML	99	105	105	105	105	105	105	105	105	105	105	105
Joullien Sav Blanc, 750 ML	77.75	77.8	77.8	77.8	77.75	77.75	77.75	77.75	77.75	77.8	77.75	77.75
Sebastien Heritage Cab Sav 1.5L	53	60	60	60	60	60	66.5	66.5	66.5	66.5	66.5	66.5
Sebastien Heritage Chardonnay 1.5L	53	60	60	60	60	60	66.5	66.5	66.5	66.5	66.5	66.5
Sebastien Heritage Fume Blanc, 1.5ML	53	60	60	60	60	60	66.5	66.5	66.5	66.5	66.5	66.5
Sebastien Heritage Merlot 1.5L	53	60	60	60	60	60	66.5	66.5	66.5	66.5	66.5	66.5
Sebastien Heritage Pinot Noir 1.5L	53	60	60	60	60	60	66.5	66.5	66.5	66.5	66.5	66.5
Sebastien Her. Cab France 1.5L	44	46	46	46	46	46	52	52	52	52	52	52

Sebastiani Her. Gamay Beaujolais 1.5L	44	46	46	46	46	46	52	52	52	52	52
Sebastiani Her. Sauv Blanc 1.5L	44	46	46	46	46	46	52	52	52	52	52
Sebastiani Her. Semillon Chardonnay 1.5L	44	46	46	46	46	46	52	52	52	52	52
Sebastiani Her. White Zin 1.5L	44	46	46	46	46	46	52	52	52	52	52
Sebastiani Her. Zinfandel 1.5L	44	46	46	46	46	46	52	52	52	52	52
Sebastiani Her. Sonoma Cask Chardonnay 750ML	110	110	110	110	110	110	110	110	110	110	110
Sebastiani Her. Sonoma Cask Cab Sauv 750ML	110	110	110	110	110	110	110	110	110	110	110
Sebastiani HEr. Sonoma Cask Merlot 750ML	130	130	130	130	130	130	130	130	130	130	130
Sebastiani Her. Sonoma Cask Barbera 750ML	138	138	138	138	138	138	138	138	138	138	138
Richard Cuneo Sparkling Wine 750ML	129	129	129	129	129	129	129	129	129	129	129
Sutter Home Cab Sauv 750ML	57.75	57.8	68	68	68	68	68	68	68	68	68
SutterHome Cab Sauv 187 ML	28	28	32	32	32	32	33	33	33	33	33
SutterHome Chardonnay 750ML	57.75	57.8	68	68	68	68	68	68	68	68	68
Sutter Home Chardonnay 187ML	28	28	32	32	32	32	33	33	33	33	33
Sutter Home Gewurztramine r 750ML	54	54	68	68	68	68	68	68	68	68	68
Sutter Home Merlot 750ML	57.75	57.8	68	68	68	68	68	68	68	68	68
Sutter Home Oleo 750ML	54	54	58	58	58	58	58	58	58	58	58
Sutter HOrne Soleo 187ML	28	28	32	32	32	32	33	33	33	33	33
Sutter Home Zion California 750ML	54	54	58	58	58	58	58	58	58	58	58
Sutter HOrne chenin Blanc 750ML	54	54	58	58	58	58	58	58	58	58	58
Sutter Home Sauv Blanc 1.5L	54	54	55	55	55	55	55	55	55	55	55
Sutter Home Sauv Blanc 750ML	54	54	58	58	58	58	58	58	58	58	58
Sutter Home Sauv Blanc 187ML	28	28	32	32	32	32	33	33	33	33	33
Sutter Home Muscat Alexandria 750ML	54	54	58	58	58	58	58	58	58	58	58

Sutter Home White Zin 750ML	54	54	58	58	58	58	58	58	58	58	58
Sutter Home white Zin 187ML	28	28	32	32	32	32	33	33	33	33	33
Sutter Home Res Cab 750ML	106	106	106	106	106	106	106	106	106	106	106
Sutter Home Res Zin 750ML	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
Sutter Home White Zin 1.5L	52	52	55	55	55	55	55	55	55	55	55
Sutter Home Red Zinfandel 1.5L	52	52	55	55	55	55	55	55	55	55	55
Sutter Home Chardonnay 1.5L	55	55	62	62	62	62	62	62	62	62	62
Sutter Home Cabernet 1.5L	55	55	62	62	62	62	62	62	62	62	62
Sutter Home Soleo 1.5L	54	52	55	55	55	55	55	55	55	55	55
Hees Sel Cab Sauv 750ML	93.75	96	96	96	96	96	96	96	96	99	99
Hees Sel Chardonnay 750ML	93.75	94	94	94	94	94	94	94	94	97	97
Hees Sel Pinot Noir 750ML	93.75	105	105	105	105	105	105	105	105	114	114
Hees Cab Sauv 750ML	181	181	181	181	181	181	181	181	181	181	181
Hees chardonnay 750ML	155	155	155	155	155	155	155	155	155	155	155
Montevina Chardonnay 750ML	81.25	81.3	81.3	81.3	81.25	81.25	81.25	81.25	81.25	81.3	81.25
Montevina Cab Sauv 750ML	81.25	81.3	81.3	81.3	81.25	81.25	81.25	81.25	81.25	81.3	81.25
Montevina Fume Blanc 750ML	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
Montevina Montenaro 750ML	87.5	86	86	86	86	86	86	100	100	100	100
Montevina Res Zin 750ML	112.5	113	113	113	112.5	112.5	112.5	112.5	112.5	113	112.5
Montevina Brioso 750ML	70.75	63.5	63.5	63.5	63.5	63.5	63.5	70	70	70	70
Montevina Barbera 750ML	86	86	86	86	86	86	100	100	100	100	100
Montevina Matrimonio 750ML	86	86	86	86	86	86	100	100	100	100	100
Montevina Zinfandel 750ML	86	86	86	86	86	86	100	100	100	100	100
Montevina White Zin 750ML	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
Guenoc Cab Sauv 750ML	113.5	114	114	114	113.5	113.5	113.5	113.5	113.5	114	113.5
Guenoc Chardonnay 750ML	110.3	110	110	110	110.3	113.5	113.5	113.5	113.5	114	113.5
Guenoc Petite Sirah 750ml	146.8	147	147	147	146.8	146.8	146.8	146.8	146.8	150	150
Guenoc Zinfandel 750ML	99	99	99	99	99	99	105	105	105	105	105

Guenoc Langtry Meritage Red 750ML	179	179	179	179	179	179	179	179	179	179	179	179
Guenoc Langtry Meritage White 750ML	84.25	84.3	84.3	84.3	84.25	84.25	84.25	92	92	92	92	92
Guenoc Beckstoffer Reserve Cabernet 750ML	338	338	338	338	338	338	372	372	372	372	372	372
Guenoc Res Chardonnay 750ML	187.3	187	187	187	187.3	187.3	207	207	207	207	207	207
guenoc Estate Chardonnay 750ml	137.5	138	138	138	137.5	137.5	137.5	137.5	137.5	138	137.5	137.5
guenoc Estate Cabernet 750ml	104	104	104	104	104	104	137.5	137.5	137.5	138	137.5	137.5
Guenoc estate sauvignon blanc 750ml	104	104	104	104	104	104	113	113	113	113	113	113
Guenoc estate petite sirah 750ml	146.8	147	147	147	146.8	146.8	150	150	150	150	150	150
Byington cab sauv 750ml	140	150	126	126	126	126	126	126	126	126	126	126
byington merlot 750ml	140	140	140	140	140	140	150	150	150	150	150	150
byington pinot noir 750ml	140	140	140	140	140	140	140	140	140	140	140	140
Byington Mt. Veeder 750ml	120	126	126	126	126	126	126	126	126	126	126	126
Byington Chardonnay 750ml	120	126	126	126	126	126	93	93	93	93	93	93
Cask one Cab Sauv 750ml	84	84	84	84	84	84	84	84	84	84	84	84
Cask one Chardonnay 750ml	84	84	84	84	84	84	84	84	84	84	84	84
Chimney Rock Cab Sauv 750ml	171.8	176	198	198	198	198	198	198	198	198	198	198
Chimney rock chardonnay 750ml	145.8	146	146	146	145.8	145.8	145.8	145.8	145.8	146	145.8	145.8
Chimney Rock Fume Blanc 750ml	140	140	140	140	140	140	140	140	140	140	140	140
Porto Whidbey 750ml	110	119	119	119	119	119	119	119	119	119	119	119
Ville Mt. Eden Cellar Select Cab Sauv 750ml	93.75	96	96	96	96	96	106	106	106	106	106	106
Ville Mt. Eden Cellar Select Chardonnay 750ml	93.75	96	96	96	96	96	106	106	106	106	106	106
Ville Mt. Eden Cellar Select Zinfandel 750ML	93.75	96	96	96	96	96	106	106	106	106	106	106
Conn Creek Cab Sauv 750ml	163	192	192	192	192	192	192	192	192	192	192	192
Conn Creek Anthology 750ml	174	174	174	174	174	174	174	174	174	174	174	174
Conn creek Merlot 750ml	152	152	152	152	152	152	152	152	152	152	152	152

Shateau St. Michelle Johannisberg Resling 750ml	65.5	65.5	65.5	65.5	65.5	65.5	65.5	68	68	68	68	68
CSM Johannisberg Resling 375ml	67.75	67.8	67.8	67.8	67.75	67.75	67.75	67.75	67.75	67.75	67.8	67.75
CSM Merlot 750ml	125	144	150	150	150	150	150	150	150	150	155	155
CSM Semillon 750ml	66	66	66	66	66	66	66	68	68	68	68	68
CSM Sauv Blanc 750ml	81	81	81	81	81	81	81	84	84	84	84	84
CSM White Resling 750ml	72	72	72	72	72	72	72	74	74	74	74	74
CSM Cab Sauv 750ml	125	130	130	130	130	130	130	133	133	133	133	133
CSM Chardonnay 750ml	114.5	120	120	120	120	120	120	124	124	124	124	124
CSM Chardonnay 375ml	120.8	121	121	121	120.8	120.8	120.8	120.8	120.8	120.8	121	120.8
CSM Chenin Blanc 750ml	72	65.5	65.5	65.5	65.5	65.5	65.5	68	68	68	68	68
CSM Gewurztramine r 750ml	65.5	65.5	65.5	65.5	65.5	65.5	65.5	68	68	68	68	68
Cold Creek Cab Sauv 750ml	177	177	177	177	177	177	177	215	215	215	215	215
Cold Creek chardonnay 1989 750ml	187	187	187	187	187	187	187	210	210	210	210	210
River Ridge Chardonnay 750ml	140.5	141	141	141	140.5	140.5	140.5	140.5	140.5	140.5	141	140.5
River Ridge Cab Sauv 750ml	161.3	161	161	161	161.3	161.3	161.3	161.3	161.3	161.3	161	161.3
River Ridge Merlot 1987, 750ml	182	182	182	182	182	182	182	182	182	182	182	182
Columbia Crest Cab Sauv 750ml	86.5	91.5	91.5	91.5	91.5	91.5	91.5	98	98	98	98	98
Columbia Crest merlot 750ml	109	113	116	116	116	116	116	118	118	118	118	118
Columbia Crest Chardonnay 750ml	75	79.5	79.5	79.5	79.5	79.5	79.5	79.5	86	86	86	86
Columbia Crest Sauv Blanc 750ml	63.5	63.5	63.5	63.5	63.5	63.5	63.5	66.5	66.5	66.5	66.5	66.5
Columbia Crest Semillon 750 ml	55	55	55	55	55	55	55	60	60	60	60	60
Columbia Crest Gewurztramine r 750ml	55	55	55	55	55	55	55	60	60	60	60	60
Columbia Crest Johannisberg Resling 750ml	55	55	55	55	55	55	55	60	60	60	60	60
Columbia Crest Blush 750ml	55	55	55	55	55	55	55	60	60	60	60	60
Columbia Crest White 750ml	55	55	55	55	55	55	55	60	60	60	60	60
Columbia Crest Semillon Chardonnay 750ml	63.5	63.5	63.5	63.5	63.5	63.5	63.5	66.5	66.5	66.5	66.5	66.5

Ironstone Vineyards Chardonnay 750ml	96.75	96.8	96.8	96.8	96.75	96.75	96.75	96.75	96.75	96.8	96.75
Ironstone Merlot 750ml	96.75	102	102	102	102	102	102	102	102	102	102
Ironstone Cab Sauv 750ml	96.75	102	102	102	102	102	102	102	102	102	102
Ironstone Shiraz 750ml	112	112	112	112	112	112	112	112	112	112	112
Ironstone Symphony 750ml	78	78	78	78	78	78	78	78	78	78	78
Ironstone Cab Franc 750ml	96.75	96.8	96.8	96.8	96.75	96.75	102	102	102	102	102

Firm C	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Jekel Cab Franc 750ML	98.25	98.25	98.25	98.25	98.25	98.25	98.25	98.25	106.7	106.7	106.7
Jekel Cab Sav 750ML	98.25	98.25	98.25	98.25	98.25	98.25	98.25	106.7	106.7	106.7	98.3
Jekel Estate Chard 750ML	84.5	84.5	84.5	84.5	84.5	84.5	98.3	98.3	98.3	98.3	98.3
Jekel Estate Merlot 750ML	118	118	118	118	118	118	125.9	125.9	125.9	125.9	125.9
Jekel Johannes Riesling 750ML	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
Jekel Pinot Noir 750ML	121.1	121.1	121.1	121.1	121.1	118	118	118	118	118	118
Jekel P.R. Meritage	118	118	118	118	118	118	118	118	118	118	118
Jekel Sanctuary Collection 750ML	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
Wente Bro Grande Brut 750ML	115	128.8	128.8	128.8	128.8	128.8	128.8	128.8	128.8	128.8	128.8
Wente Cab Sav R.E.	87.5	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1	91.1
Wente Chardonnay Riva Ranch 750ML	119.5	123.1	123.1	123.1	128.8	128.8	145.9	145.9	145.9	145.9	145.9
Wente Chardonnay Res Est 750ML	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
Wente Late Harvest Riesling Arroyo Seco 750ML	175	175	175	175	175	175	175	175	175	175	175
Estate Grown Wente Merlot Reserve Crane Ridge 750ML	119.5	145.9	145.9	145.9	145.9	145.9	145.9	145.9	145.9	145.9	145.9
Wente Cabernet Sauv 750ML	89	95	95	95	95	95	95	95	95	95	95
Wente Cabernet Sauv 375ML	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9
Estate Grown Wente Chard 1.5L	89	95	95	95	95	95	95	95	95	95	95
Estate Grown Wente Chard 375ML	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
Estate Grown Wente Johannisberg Riesling 750ML	57.8	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
Estate Grown Wente La Blanca De Blanc 66.2	57.8	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
Estate Grown Wente Sauvignon Blanc 750ML 78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	90.2	90.2
Estate Grown Wente White Zin 750ML 66.2	57.8	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
Murieta's Well Vendimia Red 750ML	240	240	240	240	240	240	240	240	240	240	240
Murieta's Well Vendimia 750ML	185	185	185	185	185	185	185	185	185	185	185

Murieta's Well Vendimia 750ML	140	140	140	140	140	140	140	140	140	140	140
Ivan Tamas Cab Sauv 750ML	78	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
Ivan Tamas Cab Sauv Res 750ML	107	107	107	107	107	107	107	107	107	107	107
Ivan Tamas Chardonnay 750ML	78	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
Ivan Tamas Chardonnay Res. 750ML	107	107	107	107	107	107	107	107	107	107	107
Ivan Tamas Trebiano. 750ML	78	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
Ivan Tamas White Zin 750ML	58	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4
Ivan Tamas Pinot Grigio 750ml	78	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
Concannon reserve assemble 750ml	132	132	132	132	132	132	132	132	132	132	132
concannon reserve assemble red 750ml	132	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
concannon petite sirah estate res 750ml	132	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4
concannon cab sauv 750ml	93	105	105	105	105	105	105	105	105	105	105
concannon chardonnay 750ml	93	105	105	105	105	105	105	105	105	105	105
Concannon Petite sirah 750ml	83	105	105	105	105	105	105	105	105	105	105
concannon sauv blanc 750ml	65.5	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2
bogle cab sauv 750ml	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	73.6	73.6
bogle chardonnay 750ml	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5	64.5
bogle fume blanc 750ml	57	57	57	57	57	57	57	57	57	57	57
bogle merlot 750ml	84	84	84	84	84	84	84	84	84	84	84
bogle petite sirah 750ml	70	70	70	70	70	70	70	70	70	73.6	73.6
bogle zin 750ml	84	64.5	64.5	64.5	64.5	64.5	64.5	70	70	83.7	83.7
chalk hill sauv blanc 750ml	134	134	134	134	134	134	134	134	134	134	134
chalk hill cab 02 750ml	175	189	189	189	189.4	189.4	189.4	189.4	189.4	189.4	189.4
chalk hill chardonnay 93 750ml	168	168	168	168	168	168	168	180	180	180	180
rodney strong estate cab sauv alexander crown 1991 750ml	167	167	167	167	167	167	167	167	167	167	167
RS Cab sauv sonoma 750ml	99	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4
RS chardonnay chalk hill 750ml	120	134.5	134.5	134.5	134.5	134.5	134.5	134.5	134.5	134.5	134.5

RS Chardonnay sonoma 750ml	99	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4
RS Pinot noir 750ml	132	132	132	132	132	132	132	132	132	132	132
RS Sauv Blanc Charlotte's home 750ml	91	91	91	91	91	91	91	91	91	91	91
RS Zinfandel old vines 750ml	116.5	116.5	116.5	116.5	116.5	116.5	138.1	138.1	138.1	138.1	138.1
RS Merlot Sonoma 750ml	143.5	143.5	143.5	143.5	143.5	143.5	143.5	143.5	143.5	143.5	143.5
RS reserve Cabernet 750ml	130.4	125	125	125	125	125	130.4	130.4	130.4	130.4	130.4
Seghesio chardonnay 750ml	85	85	85	85	85	85	85	85	85	85	85
Seghesio Cab Sauv 750ml	85	85	85	85	85	85	85	85	85	85	85
Seghesio zin 750ml	85	85	85	85	85	85	85	85	85	85	85
Seghesio Pinot Noir 750ml	108	108	108	108	108	108	108	108	108	108	108
Seghesio old Vine Zinfandel 750ml	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6	129.6
Seghesio Sangiovese 750ml	120	120	120	120	120	120	120	120	120	120	120
Seghesio Sauv Blanc 750ml	74	74	74	74	74	74	74	79	79	79	79
Seghesio Merlot 750ml	132	132	132	132	132	132	132	132	132	132.9	132.9
Domaine St George Cab Sauv 1.5L	65.4	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2
DSG Cab Sauv 750ml	65.9	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
DSG Cab Sauv 187ml	35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35
DSG Chardonnay 1.5L	65.4	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2	70.2
DSG Chardonnay 750ml	65.9	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
DSG Chardonnay 187ml	35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35	38.35
DSG White Zinfandel 1.5L	48	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6	51.6
DSG White Zin 750ml	51	57	57	57	57	57	57	57	57	57	57
DSG White Zin 187ml	35	35	35	35	35	35	35	35	35	35	35
DSG Fume Blanc 750ml	51	57	57	57	57	57	57	57	57	57	57
DSG Merlot 750ml	65.9	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
DSG Proprietors Red 1.5L	34	37	37	37	37	37	37	37	37	37	37
DSG Proprietors Red 750ml	37	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
DSG proprietors white 1.5L	34	37	37	37	37	37	37	37	37	37	37
DSG Proprietors white 750ml	37	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
DSG Premier cuvée cab sauv 750ml	103.6	106	106	106	106	106	106	106	106	106	106

DSG premier cuvee											
Chardonnay 750ml	103.6	106	106	106	106	106	106	106	106	106	106
Rochloll Pinot noir 750ml	173.88	173.88	173.88	173.88	173.88	208	208	208	208	208	208
Rochloll Sauv Blanc 750ml	107.88	107.88	107.88	107.88	107.88	129	129	129	129	129	129
Gan eden Sonoma Sauv Blanc 750ml	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
Gan Eden Alexander Valley Cab Sauv 750ml	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8
Bonny Doon Clos de Gilroy 750ml	81	81	81	81	81	81	81	81	81	81	81
bonny Doon Le Cigne Volant 750ml	178	178	178	178	178	188.8	188.8	188.8	188.8	188.8	188.8
Bonny Doon Malvasia Vins de Glaciere 750ml	149	149	149	149	149	149	149	149	149	149	149
Bonny Doon Pacific Rim Redstart 750ml	149	149	149	149	149	149	149	149	149	149	149
Bonny Doon Vin Gris 750ml	81	81	81	81	81	81	81	81	81	81	81
Bonny Doon Pacific Rim Chenin Blanc 750ml	81	81	81	81	81	81	81	81	81	81	81
ca'del solo big house red 750ml	81	81	81	81	81	81	81	81	81	81	81
ca'del solo il pescatore 750ml	121	121	121	121	121	121	121	121	121	136.2	136.2
ca'del solo malvasia bianca 750ml	87	87	87	87	87	87	87	87	87	87	87
ca'del solo moscato 750ml	91	91	91	91	91	91	91	91	91	91	91
caymus cabernet 750ml	220	220	220	220	220	220	220	220	220	220	220
caymus corvina 750ml	96	96	96	96	96	96	96	96	96	96	96
caymus sauv blanc 750ml	116	116	116	116	116	116	116	116	116	116	116
liberty school cabernet 750ml	94	94	94	94	94	94	94	94	94	94	94
liberty school chardonnay 750ml	94	94	94	94	94	94	94	94	94	94	94
marham cab sauv 750ml	139.5	139.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	145.5	156.3
marham chardonnay 750ml	123.93	123.93	123.93	123.93	123.93	123.93	137.1	137.1	137.1	137.1	137.1
marham merlot 750ml	146.7	146.7	146.7	146.7	146.7	146.7	162.3	162.3	162.3	162.3	162.3
marham sauv blanc 750ml	79	79	79	79	79	79	91	91	91	91	91
marham petite sirah 750ml	123.93	123.93	123.93	123.93	123.93	123.93	123.93	123.93	123.93	123.93	123.93
glass mountain cab sauv 750ml	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93
glass mountain chardonnay 750ml	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93	81.93

monticello estate bottled chardonnay 750ml	130	130	142	142	142	142	142	142	142	142	142	142
monticello select cab sauv 750ml	142	142	142	142	142	142	142	142	163.6	163.6	163.6	163.6
monticello estate bottled pinot noir 750ml	142	142	142	142	142	142	142	163.6	163.6	163.6	163.6	163.6
monticello estate bottled merlot 750ml	142	142	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6	181.6
phillipe lorraine cab sauv 750ml	105.6	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	128.4
P-L Chardonnay 750ml	105.6	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8
P-L merlot 750ml	144	144	160.8	160.8	160.8	160.8	160.8	160.8	160.8	160.8	172.8	172.8
P-L Zin 750ml	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6	117.6
tumbull cellars cabernet 750ml	160	160	160	160	160	160	160	160	160	160	160	160
Robert peccota winery cab sauv 750ml	176	176	176	176	176	176	176	176	176	176	176	176
R-P merlot 750ml	167.4	167.4	167.4	167.4	167.4	167.4	167.4	167.4	201	201	201	201
R-P Muscato 375ml	63	63	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
R-P Sauvignon Blanc 750ml	89	89	89	89	89	89	89	89	89	89	89	89
Northaven chardonnay 750ml	65	65	65	65	65	65	65	73.4	73.4	73.4	73.4	73.4
Northaven Cab Sauv 750ml	65	65	65	65	65	65	65	73.4	73.4	73.4	73.4	73.4
Northaven Sauv Blanc 750ml	48.2	48.2	48.2	48.2	48.2	48.2	48.2	51.8	51.8	51.8	51.8	51.8
Rutherford Hill XVS Chardonnay res 750ml	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3
Rutherford Hill Cab Sauv Res 750ml	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3
Rutherford Hill Cabernet Sauv Library Res 750ml	157.9	157.9	157.9	157.9	157.9	157.9	157.9	157.9	157.9	157.9	157.9	157.9
Rutherford Hill Zin ort 750ml	99.15	99.15	99.15	99.15	99.15	99.15	99.15	99.15	99.15	99.15	99.15	99.15
Rutherford Hill Zin Port 375ml	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
Rutherford Hill Merlot 750ml	145.7	145.7	145.7	145.7	145.7	145.7	145.7	150.5	150.5	150.5	150.5	166.1
Rutherford Hill merlot 375 ml	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
Rutherford Hill Cabernet Sauvignon 750ml	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	120.5	120.5	120.5	120.5
Jaeger Merlot Napa Valley Inglewood Vineyards 90 750ml	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	161.5	178.3
Freemark Abbey Cab Sauv Boesche 750ml	240	240	240	240	240	240	240	240	240	240	240	240

Freemark Cab Sauv napa 750ml	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	160.8	160.8
Freemark CabSauv Sycamore 750ml	206.4	206.4	206.4	206.4	206.4	206.4	206.4	206.4	206.4	206.4	206.4
Freemark Chardonnay Carp Ranch 750ml	192	192	192	192	192	192	192	198	198	198	198
Freemark Chardonnay Napa 750ml	144	144	144	144	144	144	144	144	144	144	148.8
Freemark Edelwein 375	235	235	235	235	235	235	235	244.8	244.8	244.8	244.8
Freemark Jo Reeling 750ml	82.8	82.8	82.8	82.8	82.8	82.8	82.8	87.8	87.8	87.8	87.8
Freemark Merlot Napa	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
Diamond Creek Ass Cab '91 750	450	450	450	450	450	450	450	520	520	520	520
Diamond Creek assort '93 750ml	450	450	450	450	450	450	450	450	450	480	480
Diamond Creek CabSauv '90 750ml	450	450	450	450	450	450	450	520	520	520	480
Diamond Creek Cab Sauv '89 750ml	450	450	450	450	450	450	450	450	450	450	480
Diamond Creek Gravelly Meadow Cab 750ml											
Diamond Creek Red Rock Terrace '91	520	520	520	520	520	520	520	520	520	520	480
Diamond Creek Red Rock Terrace 750ml	450	450	450	450	450	450	450	450	450	480	480
Diamond Creek Volcanic Hill '91 750ml	520	520	520	520	520	520	520	520	520	520	520
Diamond Creek Volcanic Hill '93 750ml	450	450	450	450	450	450	450	450	450	450	480
Le Blanc Blush 18L Draft	30.5	30.5	30.5	30.5	30.5	33.5	33.5	33.5	33.5	33.5	33.5
Le Blanc blush 18L Thumb	30.5	30.5	30.5	30.5	30.5	33.5	33.5	33.5	33.5	33.5	33.5
Le Blanc Blush 4L	32.65	29.5	29.5	32.65	32.65	36.25	36.25	36.25	36.25	36.25	36.25
Le Blanc Burgundy 18L Draft	30.5	30.5	30.5	30.5	30.5	33.5	33.5	33.5	33.5	33.5	33.5
Le Blanc Burgundy 18L Thumb	30.5	30.5	30.5	30.5	30.5	33.5	33.5	33.5	33.5	33.5	33.5
Le Blanc Burgundy 4L	32.65	29.5	29.5	32.65	32.65	36.25	36.25	36.25	36.25	36.25	36.25
Le Blanc Cheble 18L Draft	30.5	30.5	30.5	30.5	30.5	33.25	33.25	33.25	33.25	33.25	33.25
Le Blanc Cheble 18L Thumb	30.5	30.5	30.5	30.5	30.5	33.25	33.25	33.25	33.25	33.25	33.25
Le Blanc Cheble 4L	32.65	29.5	29.5	32.65	32.65	36.25	36.25	36.25	36.25	36.25	36.25
Le Blanc Chianti 4L	32.65	29.5	29.5	32.65	32.65	45.5	45.5	45.5	45.5	45.5	45.5
Le Blanc White Zin 18L Draft	42	42	42	42	42	45.5	45.5	45.5	45.5	45.5	45.5
Le Blanc White Zin 18L Thumb	42	42	42	42	42	45.5	45.5	45.5	45.5	45.5	45.5

Le Blanc Chardonnay 18L Thumb	57.5	57.5	57.5	57.5	57.5	60.5	60.5	60.5	60.5	60.5	60.5
Le Blanc Cab Sauv 18L Thumb	57.5	57.5	57.5	57.5	57.5	60.5	60.5	60.5	60.5	60.5	60.5
Summerfield Blush Chablis 5L box	39.5	39.6	39.6	39.5	39.5	46	46	46	46	46	46
Summerfield Burgundy 5L box	39.5	39.6	39.6	39.5	39.5	46	46	46	46	46	46
Summerfield Chablis Blanc 5L box	39.5	39.6	39.6	39.5	39.5	46	46	46	46	46	46
Summerfield Rhine 5L box	39.5	39.6	39.6	39.5	39.5	46	46	46	46	46	46
Summerfield vin Rose 5L box	39.5	39.6	39.6	39.5	39.5	46	46	46	46	46	46
Summerfield White Zin 5L box	52.4	51.6	39.6	52.4	52.4	4661.2	4661.2	4661.2	4661.2	4661.2	4661.2
Chateau Julien Chardonnay 750ml	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
CJ Merlot 750ml	85.2	70.8	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
CJ Grand Reserve CabSauv 750ml	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
CJ Gewurztraminer 750ml	63.6	54	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
Emerald Bay Cab Sauv 1.5L	46.2	42	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
Emerald Bay Cab Sauv 750ml	52.8	50	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
Emerald Bay Cab Sauv 187ml	34.85	31.5	34.85	34.85	34.85	34.85	34.85	34.85	34.85	34.85	34.85
Emerald Bay Chardonnay 1.5L	46.2	42	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
Emerald Bay Chardonnay 750ml	52.8	50	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
Emerald Bay chardonnay 187ml	34.85	31.5	34.85	34.85	34.85	34.85	34.85	34.85	34.85	34.85	34.85
Emerald Bay Gamay Beaujolais 1.5L	37.8	36	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Emerald Bay Gamay Beaujolais 750ml	44.4	42	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
Emerald Bay Merlot 1.5L	49.8	45	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
Emerald Bay Merlot 750ml	60	55.2	60	60	60	60	60	60	60	60	60
Emerald Bay Proprietors Red 1.5L	37.8	36	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Emerald Bay Proprietors Red 750ml	44.4	42	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
Emerald Bay Proprietors White 1.5L	37.8	36	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Emerald Bay Proprietors White 750ml	44.4	42	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4

Emerald bay White Zin 1.5L	37.8	36	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
Emerald Bay White Zin 750ml	44.4	42	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
Emerald Bay White Zin 187ml	34.85	41.25	34.85	34.85	34.85	34.85	34.85	34.85	34.85	34.85	34.85
Emerald Bay Sauvignon Blanc 1.5L	46.2	42	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2	46.2
emerald Bay Sauv Blanc 750ml	52.8	50	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
Weibel Green Hungarian 1.5L	52.35	52.35	52.35	52.35	52.35	52.35	52.35	52.35	52.35	52.35	52.35
Weibel Green Hungarian 750ml	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9	55.9
Carlson Cherry Wine 750ml	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Carlson Prairie Dog BLush 750ml	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Carlson Peeadactyl 750ml	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Carlson Peach 750ml	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Carlson Plum 750ml	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Carlson Apple Cider 750ml	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
Carlson Siposaurus 750ml	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
Carlson Colorado Dry White 750ml	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
Carlson White Rising 750ml	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
Carlson Prairie Dog White 750ml	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
Carlson Gewurzsaesurus 750ml	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
Carlson lynnosaurus red 750ml	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
Carlson Prairie Dog Red 750ml	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5

Firm D	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Beaulieu Vineyards G. D. Lateur 1989 750ML	195	195	195	195	195	195	195	195	195	390	195
Cameros Reserves Pinot Noir Reserve 750ML	190	190	190	190	189.99	235	234.99	234.99	235	235	235
Cameros Reserves Chardonnay Reserves 750ML	190	190	190	190	189.99	190	189.99	189.99	190	190	190
Estates Cameroe Chardonnay 750ML	124	124	124	124	133.99	134	13.99	133.99	134	134	134
Estates Napa Cabernet 750ML	134	134	134	134	133.99	134	133.99	133.99	134	134	134
Estates Sauv Blanc 750ML	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
Estates Pinot Noir Cameros 750ML	124	124	134	134	133.99	149	148.99	148.99	149	149	149
Beautour chardonnay 750ML	90	89.99	89.99	89.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99
Beautour chardonnay 375ML	50	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99
Beautour Cab Sav 750ML	97	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99
Beautour Cab Sav 375ML	50	49.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99
Beautour Merlot 750ML	97	96.99	106	106	105.99	120	119.99	119.99	120	120	120
Beautour Pinot Noir 750ML	90	89.99	106	106	105.99	106	105.99	105.99	106	106	106
Beautour Fume Blanc 750ML	75	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99
Beautour Gamay Beaujolais 750ML	75	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99
Beautour Gamay Beaujolais 375ML	41	40.99	40.99	40.99	40.99	40.99	40.99	40.99	40.99	40.99	40.99
Estates Signet Tapestry '91 750ML	190	190	190	190	189.99	190	189.99	189.99	190	190	190
Napa Select White 1.5L	59	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99
Napa Select White 750ML	59	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99
Napa Select Red 1.5 L	59	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99
Napa Select Red 750ML	59	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99
Blossom Hill White Zin 1.5L	53	52.99	52.99	52.99	52.99	52.99	52.99	52.99	52.99	52.99	52.99
Blossom Hill White Zin 750ML	52	51.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99
Blossom Hill White Zinfandel 187ML	33	32.99	32.99	32.99	32.99	32.99	32.99	32.99	32.99	32.99	32.99
Blossom Hill Chardonnay 1.5L	55	54.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99

Blossom Hill Chardonnay 750ML	55	54.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99
Blossom Hill Chardonnay 187ML	36	35.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99
Blossom Hill Sauv Blanc 1.5 L	50	49.99	52.99	52.99	52.99	52.99	52.99	52.99	52.99	52.99	52.99
Blossom Hill Sauv Blanc 750ML	52	51.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99
Blossom Hill Cab Sauv 1.5L	55	54.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99
Blossom Hill Cab Sauv 750ML	55	54.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99	58.99
Blossom Hill Cab Sauv 187ML	36	35.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99	38.99
Blossom Hill Merlot 1.5L	60	59.99	64.99	64.99	64.99	64.99	64.99	64.99	64.99	64.99	64.99
Blossom Hill Merlot 750ML	55	54.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
B.V. Chardonnay Carnoso 750ML	119	119	119	119	118.99	119	118.99	118.99	119	119	119
B.V. Cab Sauv Carnoso 750ML	119	119	119	119	118.99	119	118.99	118.99	119	119	119
B.V. Sauv Blanc LAke Co 750ML	78	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
B.V. Merlot Carnoso 750ML	130	130	130	130	151.09	151.1	151.09	151.09	151.1	151.1	151.1
B.V. Pinot Noir 750ML	119	119	119	119	118.99	119	118.99	118.99	119	119	119
B.V. Grand Res Pinot noir 91/02	119	119	119	119	118.99	119	118.99	118.99	119	119	119
B.V. Grand Reserve Cab Sauv '88/90	119	119	119	119	118.99	119	118.99	118.99	119	119	119.9
B.V. Carnoso Sparkling 750ML	152	152	152	152	151.99	152	151.99	151.99	152	152	152
B.V. Chardonnay 91 750ml	119	119	119	119	118.99	119	118.99	118.99	119	119	96.99
Cain Cellars Cane Cuvee 95 750ml	140	140	152	152	151.99	152	151.99	151.99	152	152	152
cain five 92 750ml	170	170	170	170	169.99	170	169.99	169.99	170	170	170
cain cuvee 92 750ml	152	152	152	152	151.99	152	151.99	151.99	152	152	152
cellstoga vineyards chardonnay 750ml	100	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99
cellstoga cab sauv 750ml	110	110	110	110	109.99	110	109.99	109.99	110	110	110
cellstoga merlot 750ml	136	136	136	136	135.99	136	135.99	135.99	136	136	136
cellstoga pinot noir 750ml	113	113	113	113	112.99	113	112.99	112.99	113	113	113
christian brothers chardonnay 1.5l	49	48.99	48.99	48.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99
christian brothers chardonnay 750ml	54	53.99	53.99	53.99	73.99	73.99	73.99	73.99	73.99	73.99	73.99

christian brothers cab sauv 1.5l	49	48.99	49.99	49.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99
christian brothers cab sauv 750ml	54	53.99	53.99	53.99	73.99	73.99	73.99	73.99	73.99	73.99	73.99
christian brothers white zin 1.5l	40	39.99	39.99	39.99	43.99	43.99	43.99	43.99	43.99	43.99	43.99
christian brothers white zin 750ml	44	43.99	43.99	43.99	45.99	45.99	45.99	45.99	45.99	45.99	45.99
christian brothers sauv blanc 750ml	44	43.99	43.99	43.99	45.99	45.99	45.99	45.99	45.99	45.99	45.99
Clos du Val Cab sauv res 90 750ml	328	328	328	328	327.99	328	327.99	327.99	328	328	328
CDV cab sauv stag's leap 91/92 750ml	190	190	187	187	189.99	190	189.99	216.99	217	217	217
CDV merlot 750ml	206	206	206	206	205.99	221.9	221.9	221.9	221.9	221.9	221.9
CDV chardonnay, carneros 93 750ml	132	132	132	132	141.99	142	141.99	141.99	142	142	142
CDV Cab Napa 91/92 750ml	142	142	142	142	141.99	142	141.99	141.99	142	142	142
CDV Res 90 750ml	328	328	328	328	327.99	328	327.99	327.99	328	328	328
CDV Semillon 750ml	103	103	103	103	102.99	137	136.99	136.99	137	137	137
CDV Zinfandel SLD 91 750ml	137	137	137	137	136.99	137	136.99	136.99	137	137	137
CDV Pinot noir Carneros 91 750ml	137	137	137	137	136.99	170	169.99	169.99	170	170	170
CDV le clos chardonnay 92 750ml	85	84.99	84.99	84.99	84.99	84.99	84.99	84.99	84.99	84.99	84.99
CDV library wines cab sauv 93 750ml	186	186	227	227	250.99	251	250.99	320.99	321	321	321
Covey run cabernet/merlot 750ml	100	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99	107
Covey Run Johannisberg Reisling 750ml	62	61.99	61.99	61.99	61.99	59.99	59.99	69.99	69.99	69.99	69.99
Covey Run Gewurztraminer 750ml	62	61.99	61.99	61.99	61.99	59.99	59.99	81.99	81.99	81.99	81.99
covey run chenin blanc 750ml	62	61.99	61.99	61.99	61.99	59.99	59.99	69.99	69.99	69.99	69.99
Covey run Fume blanc 750ml	75	74.99	74.99	74.99	74.99	73.99	73.99	87.99	87.99	87.99	87.99
Covey run Merlot 750ml	116	116	116	116	115.99	125	124.99	124.99	125	125	125
Covey run cab sauv 750ml	107	107	116	116	115.99	125	124.99	124.99	125	125	125
Covey run chardonnay 750ml	96	95.99	95.99	95.99	95.99	107	106.99	106.99	107	107	107
Covey run Res Chardonnay 750ml	137	137	137	137	136.99	153	152.99	152.99	153	153	153
Covey run ice wine 375ml	192	192	192	192	191.99	192	191.99	191.99	192	192	192
Cuvaison chardonnay 94 750ml	165	165	170	170	169.99	170	169.99	169.99	170	170	170

Cuvaison chardonnay res 92/93 750ml	245	245	265	265	264.99	265	264.99	264.99	265	265	265
Cuvaison merlot 93 750ml	234	234	234	234	233.99	234	233.99	233.99	234	234	234
Cuvaison cab sauv 91/92 750ml	210	210	210	210	209.99	210	209.99	209.99	210	210	210
Cuvaison erie pinot noir 750ml	202	202	134	134	133.99	134	133.99	133.99	134	134	134
Cuvaison pinot noir 92/93 750ml	202	202	233	233	232.99	233	232.99	232.99	233	233	233
Delicato Blue Label Cab Sauv 1.5L 750ml	42	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99
Delicato Blue Label Cab Sauv 750ml	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
Delicato Chardonnay 1.5L	42	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99
Delicato chardonnay 750ml	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
Delicato blue label merlot 1.5ml	42	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99
Delicato Blue Label Merlot 750ml	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
Delicato Blue Label Red Zin 1.5L	42	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99	41.99
Delicato Blue Label Red Zin 750ml	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
Delicato Blue Label Fume Blanc 1.5L	42	41.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99
Delicato Blue Label Fume Blanc 750ml	54	53.99	46.99	46.99	46.99	46.99	46.99	46.99	46.99	46.99	46.99
Delicato Blue Label White Zin 1.5L	42	41.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99
Delicato Blue Label White Zin 750ml	54	53.99	46.99	46.99	46.99	46.99	46.99	46.99	46.99	46.99	46.99
Dore Floral Series Cab Sauv 1.5L	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
Dore Floral Series Cab Sauv 750ml	66	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99
Dore Floral Series Chardonnay 1.5L	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
Dore Floral Series Chardonnay 750ml	66	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99
Dore Floral Series White Zin 750ml	66	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99
Ferrari-Casano Chardonnay Res 92/93 750ml	257	257	257	257	256.99	257	256.99	272.99	273	273	273
Ferrari-Casano Chardonnay 94 750ml	196	196	196	196	195.99	196	195.99	195.99	196	196	196

Ferrari-Carano Cab Sauv 91 750ml	144	144	190	190	189.99	190	189.99	189.99	190	190	190
Ferrari-Carano Merlot 92 750ml	190	190	205	205	204.99	205	204.99	204.99	205	205	205
Ferrari-Carano Fume Blanc 92 750ml	107	107	107	107	106.99	107	106.99	106.99	107	107	107
Ferrari-Carano Zinfandel 92/92 750ml	134	134	134	134	133.99	134	133.99	133.99	134	134	134
Ferrari-Carano Eldorado Gold 375ml	297	297	297	297	296.99	297	296.99	389.99	390	390	390
Ferrari-Carano Res 750ml	213	213	213	213	212.99	213	212.99	212.99	213	213	213
Ferrari-Carano siena 93 750ml	108	108	108	108	107.99	108	107.99	124.99	125	125	125
Hahn Chardonnay 93/94 750ml	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
Hahn Cab Sauv 92/93 ?	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
Hahn merlot 94 750ml	106	106	106	106	105.99	106	105.99	105.99	106	106	106
Hahn Cab Franc 93/94 750ml	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
haywood winer's select chardonnay 1.5l	70	69.99	69.99	69.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
Haywood winers select chardonnay 750ml	78	77.99	77.99	77.99	87.99	87.99	87.99	87.99	87.99	87.99	87.99
haywood winers select cabernet 1.5l	70	69.99	69.99	69.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
Haywood winers select 750ml	78	77.99	77.99	77.99	87.99	87.99	87.99	87.99	87.99	87.99	87.99
Haywood zinfandel los chamizal 750ml	133	133	133	133	132.99	133	132.99	132.99	133	133	133
Haywood rocky terrace zin 93 750ml	87	86.99	86.99	86.99	86.99	86.99	86.99	86.99	86.99	86.99	86.99
Hearstwood chardonnay 750ml	106	106	106	106	105.99	106	105.99	105.99	106	106	106
Konocil Fume Blanc 750ml	79	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99
Konocil White Resling 750ml	79	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99
Konocil Cab Sauv 750ml	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
Konocil merlot 750ml	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
Konocil Cab franc 750ml	96	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99	95.99
Konocil Semillon/Chard onnay 750ml	79	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99	78.99
Laurel Glen counterpoint 93 750ml	159	159	159	159	158.99	159	158.99	158.99	159	159	159
Laurel glen Cab Sauv 92 750ml	156	156	156	156	155.99	156	155.99	155.99	156	156	156
LAurel glen Terra Rosa 93 750ml	103	103	103	103	102.99	103	102.99	102.99	103	103	103
Laurel Glen Rede 750ml	70	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99

J. Lohr Cab Sauv Seven Oaks 750ml	109	109	109	109	107.99	108	107.99	107.99	108	108	108
J Lohr Chardonnay Riverstone 750ml	109	109	109	109	107.99	108	107.99	107.99	108	108	108
J. Lohr J Resling Baymist 750ml	68	67.99	67.99	67.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
J Lohr Monterey Gamay Wildflower 750ml	68	67.99	67.99	67.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
J Lohr Pinot BLanc October Nights 750ml	109	109	109	109	108.99	109	108.99	108.99	109	109	109
J Lohr south Ridge 750ml	109	109	109	109	108.99	109	108.99	108.99	109	109	109
J Lohr Cypress chardonnay 1.5l	80	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99
J Lohr Cypress chardonnay 750ml	73	72.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99
J Lohr cypress Cab Sauv 1.5L	80	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99
J Lohr Cypress cab sauv 750ml	73	72.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99
J lohr cypress merlot 1.5l	90	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99
J lohr Cypress White Zin 750ml	54	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99	53.99
J Lohr Fume blanc 750ml	54	53.99	68.99	68.99	68.99	68.99	68.99	68.99	68.99	68.99	68.99
Louis Martini classic chardonnay6 750ml	97	96.99	96.99	96.99	96.99	106	105.99	105.99	106	106	106
LM Classic Cab Sauv 750ml	97	96.99	96.99	96.99	96.99	106	105.99	105.99	106	106	106
LM Classic Merlot 750ml	97	96.99	96.99	96.99	96.99	106	105.99	105.99	106	106	106
LM Classic Sauv Blanc 750ml	82	81.99	81.99	81.99	81.99	106	105.99	105.99	106	106	106
LM Heritage vineyard Cab Sauv Monte 750ml	212	212	212	212	211.99	212	211.99	211.99	212	212	212
LM Heritage Barbera 750ml	110	110	110	110	109.99	115	114.99	114.99	115	115	115
LM REserve sErices Chardonnay 750ml	139	139	139	139	138.99	139	138.99	138.99	139	139	139
LM Res Serices cab 750ml	139	139	139	139	138.99	139	138.99	138.99	139	139	139
LM Res Series Merlot 750ml	139	139	139	139	138.99	139	138.99	138.99	139	139	139
Monterey Peninsula Pinot BLanc 94 750ml	123	123	123	123	132.9	132.9	132.9	132.9	132.9	132.9	132.9
MP Cab Sauv 91 750ml	114	114	114	114	113.99	114	113.99	113.99	114	114	114
MP Chardonnay 92 750ml	114	114	114	114	113.99	114	113.99	113.99	114	114	114
MP Barbera 91 750ml	114	114	114	114	113.99	114	113.99	113.99	114	114	114

MP zinfandel 91 750ml	114	114	114	114	113.99	114	113.99	113.99	114	114	114
MP Dr res Cab Sauv 88 750ml	161	161	161	161	160.99	161	160.99	162.99	163	193	163
Monterra Merlot 750ml	99	98.99	98.99	98.99	98.99	98.99	98.99	98.99	98.99	98.99	98.99
Monterra Petite Sirah 750ml	99	98.99	98.99	98.99	98.99	98.99	98.99	98.99	98.99	98.99	98.99
Newton Vineyards Chardonnay (unfiltered) 93 750ml	233	233	233	233	232.99	233	232.99	232.99	233	233	233
Newton chardonnay 94 750ml	149	149	149	149	148.99	149	148.99	148.99	149	149	149
Newton Cab Sauv 92 750ml	202	202	202	202	201.99	202	201.99	201.99	202	202	202
Newton merlot 93 750ml	233	233	202	202	201.99	202	201.99	201.99	202	202	202
Newton special cuvee chard 94 750ml	114	113.9	113.9	113.9	113.88	113.9	113.88	113.88	113.9	113.9	113.9
Pebble Creek Merlot 18L	76	75.99	75.99	75.99	75.99	75.99	75.99	75.99	75.99	75.99	75.99
Quail Ridge Cab Sauv Res 750ml	142	142	142	142	141.99	187	186.99	186.99	187	187	187
Quail Ridge Cab Sauv 750ml	123	123	123	123	122.99	123	122.99	122.99	123	123	123
Quail Ridge Chardonnay 92 750ml	155	155	155	155	154.99	155	154.99	154.99	155	155	155
Quail Ridge Merlot 750ml	120	120	160	160	159.99	162	161.99	161.99	162	162	162
Quail Ridge Sauv Blanc 750ml	90	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99
RH Phillips Rhône Varietals Mourvedre 500ml	75	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99
RHP Alliance 750ml	85	84.99	60	60	60	60	60	60	60	60	60
RHP EXP Voignier 94 750ml	116	116	116	116	115.99	116	115.99	115.99	116	116	116
RHP Night Harvest Sauv Blanc 1.5L	48	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99
RHP Night Harvest Sauv Blanc 750ml	57	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99
RHP Night harvest cuvee Rouge 1.5L	48	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99
RHP Night Harvest Cuvee Rouge 750ml	57	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99
RHP Night Harvest Cuvee Rouge 500ml	66	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99
RHP Night Harvest White Zin 1.5L	48	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99	47.99
RHP Night Harvest White Zin 750ml	57	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99
RHP White Zin 500ml	66	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99	65.99
RHP Chenin Blanc 750ml	57	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99	56.99

RHP Chardonnay 1.5l	70	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99
RHP Chardonnay 750ml	75	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99
RHP Chardonnay 500ml	78	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
RHP Cab Sauv 1.5l	69	68.99	54.99	54.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99
RHP Cab Sauv 750ml	78	77.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99	69.99
RHP Cab Sauv 500ml	78	77.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99	74.99
RHP Diamond G Chardonnay 750ml	78	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99	77.99
Rocky Mountain Mead ery Carmelot Sect 750ml	84	83.99	83.99	83.99	83.99	83.99	83.99	87.99	87.99	87.99	87.99
Rocky mountain meadery Lancelot Medium dry 750ml	84	83.99	83.99	83.99	83.99	83.99	83.99	83.99	87.99	87.99	87.99
Rocky mountain meadery Gunsberg Semi Sweet 750ml	84	83.99	83.99	83.99	83.99	83.99	83.99	83.99	87.99	87.99	87.99
Rocky mountain Raspberry 750ml	103	103	103	103	102.99	103	102.99	102.99	107	107	107
Rusty Staubs Chardonnay 750ml	90	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99
Rusty Staubs Cab Sauv 750ml	90	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99	89.99
Rutherford Estate Sauv Blanc 750ml	75	74.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99
Rutherford Chardonnay 750ml	80	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99
Rutherford Cab Sauv 750ml	80	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99
Rutherford Merlot 750ml	80	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99
Rutherford Pinot noir 50m	80	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99	79.99
Rutherford White Zin 750ml	75	74.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99	54.99
St Andrews Chardonnay 95 750ml	97	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99
San Martin Cab Sauv 1.5l	38	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99
San Martin 750ml	50	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99
San Martin Chardonnay 1.5l	38	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99
San Martin Chardonnay 750ml	50	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99
San Martin Sauv Blanc 1.5l	38	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99

San Martin Sauv Blanc 750ml	50	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99
San Martin White Zin 1.5l	38	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99
San Martin White Zin 750ml	50	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99
Simi chardonnay res 92 750ml	274	274	274	274	273.99	274	273.99	273.99	274	274	274
Simi CabSauv res 91 750ml	336	336	336	336	335.99	336	335.99	335.99	336	336	336
Simi Chardonnay 92/93 750ml	152	152	152	152	151.99	152	151.99	151.99	152	152	152
Simi Chardonnay 92/93 375ml	157	157	157	157	156.99	157	156.99	156.99	157	157	157
Simi CabSauv 92 750ml	162	162	162	162	161.99	162	161.99	161.99	162	162	162
Simi Cab Sauv 92 375ml	166	166	166	166	165.99	166	165.99	165.99	166	166	166
Simi Sauv Blanc 93 750ml	90	89.99	91.99	91.99	91.99	91.99	91.99	91.99	91.99	91.99	91.99
Simi Rose of Cabernet 94 750ml	83	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99
Simi Sandoz 92/93 750ml	158	158	158	158	157.99	158	157.99	157.99	158	158	158
Smith and hook merlot 94 750ml	156	156	156	156	155.99	156	155.99	155.99	156	156	156
Smith and hook Cab sauv 90 750ml	156	156	156	156	155.99	156	155.99	155.99	156	156	156
Robert Stemmer pinot noir 750ml	182	182	182	182	181.99	182	181.99	207.99	208	208	208
Robert stemmer etched magnum 1.5l	100	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99	99.99
Three Oaks White Zin 18l	56	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99	55.99
Three Oaks CabSauv 18l	73	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99
Three Oaks Chardonnay 18l	73	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99
Three Oaks Red 4l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
Three Oaks Red 18l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
Three Oaks red 1.5l	36	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99
Three Oaks White 4l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
Three Oaks white 18l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
Three Oaks White 1.5l	36	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99
Three Oaks blush 4l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
White oaks blush 18l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
White Oaks blush 1.5l	36	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99
Three Oaks Blush 750ml	83	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99	82.99
Tourelle Chianti 4l	47	46.99	42.99	42.99	42.99	42.99	42.99	42.99	42.99	42.99	42.99
Tourelle chianti 18l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99

Toruello Chianti 1.5l	36	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99	35.99
MartinBros Prim Appassito 91 750ml	100	100	100	100	100	100	100	101.99	102	102	102
MartinBros Pinot Grigio 94 750ml	100	100	100	100	100	100	100	115.99	116	116	116
Martin Bros Moscato Allegro 94 750ml	97	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99
Martin Bros Chardonnay in Bott 93 750ml	116	116	116	116	115.99	116	115.99	115.99	116	116	116
Martin Brothers Zinfandel Primi 750ml	97	96.99	96.99	96.99	96.99	115	114.99	114.99	115	115	115
Martin Brothers nebbiolo 92 750ml	97	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99	96.99
Martin Bros sangiovese I pello 750ml	116	116	116	116	115.99	116	115.99	115.99	116	116	116
MartinBros Cab Etrusco 750ml	153	153	153	153	152.99	153	152.99	152.99	153	153	153
Martin Bros vin santo 750ml	132	132	132	132	132	132	132	132	132	132	132
Chef's Private Res marsaleo 1.5l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99
Chef's Private Res Sherry 1.5l	40	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99	39.99

Firm E	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Bardene											
Chardonnay	69.53	69.53	69.53	69.53	79.13	79.13	79.13	79.13	79.13	79.13	79.13
Bardene											
Sauv Blanc	47.93	47.93	47.93	47.93	47.93	47.93	61.93	61.93	61.93	61.93	61.93
Bardene											
White Zin	49.16	49.16	49.16	49.16	49.16	49.16	49.16	49.16	49.16	49.16	49.16
Bardene											
White Zin	47.93	47.93	47.93	47.93	47.93	47.93	47.93	47.93	47.93	47.93	47.93
Bardene											
Cab Sauv	69.53	69.53	69.53	69.53	79.13	79.13	79.13	79.13	79.13	79.13	79.13
750L											
Bel arbor											
Chardonnay	55.76	55.76	55.76	55.76	55.76	55.76	55.76	58.16	58.16	58.16	58.16
1993 1.5L											
Bel Arbor											
Chardonnay	58.73	58.73	58.73	58.73	58.73	58.73	58.73	65.93	65.93	65.93	65.93
1993 750ML											
Bel arbor											
Chardonnay	35.86	35.86	35.86	35.86	47.93	47.93	47.93	47.93	47.93	47.93	47.93
1993 1.5L											
White Zin	44.96	44.96	44.96	44.96	44.96	44.96	44.96	52.16	52.16	52.16	52.16
Bardene											
White Zin	47.93	47.93	47.93	47.93	47.93	47.93	47.93	55.13	55.13	58.16	58.16
1993 750ML											
Merlot 1993	62.96	62.96	62.96	62.96	62.96	62.96	67.16	67.16	67.16	67.16	67.16
1.5L											
Bel Arbor	74.33	74.33	74.33	74.33	74.33	74.33	80.33	80.33	80.33	80.33	80.33
Cab Sauv											
1992 1.5L	55.76	55.76	55.76	55.76	55.76	55.76	55.76	58.16	58.16	58.16	58.16
Bel Arbor											
Cab Sauv	58.73	58.73	58.73	58.73	58.73	58.73	58.73	65.93	65.93	65.93	65.93
1992 750ML											
Bardene											
Chardonnay	110.3	110.3	110.3	110.3	110.3	110.33	110.3	110.3	110.3	110.3	110.3
Bardene											
Cab Sauv	116.3	116.3	116.3	116.3	116.3	116.33	116.3	123.5	123.5	123.5	123.5
750ML											
CRC											
Mondavi											
Chardonnay	58.16	58.16	58.16	58.16	58.16	58.16	58.16	61.76	61.76	61.76	61.76
y 1.5L											
Mondavi											
Chardonnay	61.13	61.13	61.13	61.13	61.13	61.13	61.13	64.73	64.73	64.73	64.73
1.5L											
Chenin	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16
Blanc 1.5L											
Blanc	51.53	51.53	51.53	51.53	51.53	51.53	51.53	51.53	51.53	51.53	51.53
Mondavi											
Merlot	75.53	75.53	75.53	75.53	75.53	75.53	75.53	82.73	82.73	82.73	82.73
Mondavi											
Sauv Blanc	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16
Mondavi											
Sauv Blanc	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13
750ML											
Mondavi											
Rhine 1.5L	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76
Mondavi											
Chablis 4L	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17
Mondavi											
Chablis 1.5L	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76
Mondavi											
Vin	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17
Rose 4L											
Mondavi											
Vin	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76
Rose 1.5L											
White Zin	52.16	52.16	52.16	52.16	52.16	52.16	52.16	52.16	52.16	52.16	52.16
Mondavi											
White Zin	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13
Mondavi											
Barberone	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17
Mondavi											
Bravissimo	49.97	49.97	49.97	49.97	49.97	49.97	49.97	49.97	49.97	49.97	49.97
Mondavi											
Bravissimo	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76
1.5L											

Mondavi Burgundy 4L	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17
Burgundy 1.5L	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76
Mondavi Chardonnay 4L	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17	45.17
Mondavi Chardonnay 1.5L	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76	40.76
Mondavi Zinfandel 4L	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16	46.16
Mondavi Zinfandel 1.5L	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13	55.13
Mondavi Cab Sauv 4L	58.16	58.16	58.16	58.16	58.16	58.16	58.16	61.76	61.76	61.76	61.76
Mondavi Cab Sauv 750ML	61.13	61.13	61.13	61.13	61.13	61.13	61.13	64.73	64.73	64.73	64.73
Canyon road Chardonnay 1.5L	58.16	58.16	58.16	58.16	58.16	71.96	71.96	71.96	71.96	71.96	71.96
Canyon road Chardonnay 750ML	74.33	74.33	74.33	74.33	74.33	80.33	80.33	80.33	80.33	80.33	80.33
Road Sauv Blanc 750ML	74.33	74.33	74.33	74.33	74.33	80.33	80.33	80.33	80.33	80.33	80.33
Road Merlot 750ML	86.33	86.33	86.33	86.33	86.33	92.33	92.33	92.33	92.33	92.33	92.33
Road Cab Sauv 1.5L	58.16	58.16	58.16	58.16	58.16	71.96	71.96	71.96	71.96	71.96	71.96
Canyon Road Cab Sauv 750ML	74.33	74.33	74.33	74.33	74.33	80.33	80.33	80.33	80.33	80.33	80.33
Creek Chardonnay 750ml	137.9	137.9	137.9	137.9	137.9	137.93	137.9	155.9	155.9	155.9	155.9
Creek Fleur de Cameros 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	125.9	125.9	125.9	125.9
Creek pinot 750ml	155.9	155.9	170.3	170.3	170.3	170.33	179.9	179.9	179.9	179.9	179.9
Creek pinot noir los cameros 375ml	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93
Creek Pinot noir Fleur de cameros 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	125.9	125.9	125.9	125.9
Creek Signature reserve 1991 750ml	140	140	140	140	140	140	140	140	140	140	140
Krug Chardonnay 750ml	105.5	105.5	105.5	105.5	105.5	105.53	105.5	115.3	115.3	115.3	115.3
Krug 375ml Krug	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13
Chardonnay Cameros reserve 750ml	147.5	147.5	147.5	147.5	147.5	147.53	147.5	147.5	147.5	147.5	147.5
Krug Chenin Rose 750ml	58.73	58.73	58.73	58.73	58.73	58.73	58.73	61.73	61.73	61.73	61.73
Resling 750ml	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13
Krug White Resling 750ml	58.73	58.73	58.73	58.73	58.73	58.73	58.73	67.13	67.13	67.13	67.13
Beaujolais 750ml	68.33	68.33	68.33	68.33	68.33	68.33	68.33	67.13	67.13	67.13	67.13
Noir Loo Cameros 750ml	93.53	93.53	93.53	93.53	93.53	93.53	93.53	115.1	115.1	115.1	115.1
Krug Merlot 750ml	119.9	119.9	119.9	119.9	119.9	119.93	119.9	133.1	133.1	133.1	133.1
Krug Cab Sauv 750ml	105.5	105.5	105.5	105.5	105.5	105.53	105.5	115.1	115.1	115.1	115.1

Krug Cab Sauv 575ml	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13
Krug Cab Sauv VS vs 1994 750ml	219.5	219.5	219.5	219.5	239.9	239.93	239.9	239.9	239.9	239.9	239.9	239.9
Krug Cab Sauv VS 1995 750ml	219.5	219.5	219.5	219.5	239.9	239.93	239.9	239.9	239.9	239.9	239.9	239.9
Zinfandel 750ml	68.33	68.33	68.33	68.33	68.33	68.33	68.33	85.13	85.13	85.13	85.13	85.13
Cocetti Chardonnay 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9	107.9
Cocetti Sauv Blanc 750ml	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93
Cocetti Cab Sauv 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9	107.9
Cellers Cab Sauv, Batto	164.3	164.3	164.3	164.3	164.3	164.33	164.3	164.3	164.3	164.3	164.3	164.3
Satre 750ml	164.3	164.3	164.3	164.3	164.3	164.33	164.3	164.3	164.3	164.3	164.3	164.3
Estancia Chardonnay Monterey co 250ml	95.53	95.53	95.53	95.53	95.53	95.53	101.9	101.9	101.9	101.9	101.9	101.9
Res Chardonnay 250ml	171.5	171.5	171.5	171.5	171.5	171.53	171.5	171.5	171.5	171.5	171.5	171.5
Estancia Sauv Blanc Alex Valley 750ml	83.93	83.93	83.93	83.93	83.93	83.93	95.93	95.93	95.93	95.93	95.93	95.93
Meritage 750ml	111.5	111.5	111.5	111.5	111.5	111.53	111.9	111.9	111.9	111.9	111.9	111.9
Meritage 250ml	135.5	135.5	135.5	135.5	135.5	135.53	143.9	143.9	143.9	143.9	143.9	143.9
Estancia Pinot noir 250ml	99.53	99.53	99.53	99.53	99.53	99.53	111.5	111.5	111.5	111.5	111.5	111.5
Merlot 750ml	119.5	119.5	119.5	119.5	119.5	119.53	129.5	129.5	129.5	129.5	129.5	129.5
Estancia Sangiovese 1994 750ml	171.5	171.5	171.5	171.5	171.5	171.53	171.5	171.5	171.5	171.5	171.5	171.5
Alexander Valley 750ml	99.53	99.53	99.53	99.53	99.53	99.53	111.5	111.5	111.5	111.5	111.5	111.5
Premium White 1994 1.5l	46.16	46.16	46.16	46.16	50.96	50.96	50.96	50.96	50.96	50.96	50.96	50.96
Fetzer Chardonnay Sundial 1994 1.5l	71.96	71.96	71.96	71.96	71.96	71.96	71.96	80.96	80.96	80.96	80.96	80.96
Fetzer Chardonnay Sundial 1994 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	93.53	93.53	93.53	93.53	93.53
Fetzer Chardonnay Sundial 1994 575ml	45.53	45.53	45.53	45.53	51.53	51.33	51.33	51.33	51.33	51.33	51.53	51.53
Fetzer Chardonnay barrel Select 1993 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9	107.9
Fetzer Chardonnay Reserve 1992 750ml	149.9	149.9	149.9	149.9	149.9	149.93	149.9	149.9	149.9	149.9	149.9	149.9
Fine blanc 1993 750ml	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73
Fetzer Sauv Blanc Barrel Select 1994 750ml	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93

Fetzer Jo Reeling 1994 750ml	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73	62.33	62.33	62.33	62.33
Fetzer Late Harvest Jo Reeling Res 1993 750ml	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93
Fetzer Gewurztrami nar 94 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	74.33	74.33	74.33	74.33	74.33
White Zin 1993 750ml	57.53	57.53	57.53	57.53	57.53	57.53	57.53	57.53	62.33	62.33	62.33	62.33
Red NV 1.5L	46.16	46.16	46.16	46.16	50.96	50.96	50.96	50.96	50.96	50.96	50.96	50.96
Fetzer Pinot Noir res 1990 750ml	149.9	149.9	149.9	149.9	149.9	149.93	149.9	149.9	149.9	149.9	149.9	149.9
Fetzer Pinot Noir Barrel Select 1992 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9	107.9
Fetzer Petite Sirah Res 1990 750ml	131.9	131.9	131.9	131.9	131.9	131.93	131.9	131.9	131.9	131.9	131.9	131.9
Garnay Beaujolais 94 750ml	64.73	64.73	64.73	64.73	64.73	64.73	64.73	64.73	62.33	62.33	62.33	62.33
Barrel Select 92 750ml	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93
Res 91 750ml	131.9	131.9	131.9	131.9	131.9	131.93	131.9	131.9	131.9	131.9	131.9	131.9
Merlot Eagle Peak 1993 750ml	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93
Merlot Barrel Select 93 750ml	119.9	119.9	131.9	131.9	131.9	131.93	131.9	131.9	131.9	131.9	131.9	131.9
Fetzer Cab Sauv Valley Oaks 93 1.5L	71.96	71.96	71.96	71.96	71.96	71.96	71.96	71.96	80.96	80.96	80.96	80.96
Fetzer Cab Sauv valley oaks 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	93.53	93.53	93.53	95.53
Fetzer Cab Sauv Valley Oaks 375ml	45.53	45.53	45.53	45.53	51.53	51.53	51.53	51.53	51.53	51.53	51.53	51.53
Fetzer Cab Sauv Barrel Select 1992 750ml	119.9	119.9	119.9	119.9	119.9	119.93	119.9	119.9	119.9	119.9	119.9	119.9
Fetzer Cab Sauv Barrel Select Firestone Prosperity MElot 750ml	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93
Firestone Prosperity White 750ml	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	69.53	69.53	69.53	69.53
Firestone Chardonnay 750ml	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33
Firestone Sauvignon Blanc 750 ml	101.9	101.9	101.9	101.9	101.9	101.93	101.9	101.9	101.9	101.9	101.9	101.9
Firestone Gewurztrami 1993 750ml	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93
Firestone Jo Reeling 375ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93
	129.5	129.5	129.5	129.5	129.5	129.53	129.5	129.5	129.5	129.5	129.5	129.5

Firestone Propriety Red 250ml	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33
Merlot Firestone	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9
Cab Sauv 250ml Firestone	101.9	101.9	101.9	101.9	101.9	101.93	101.9	101.9	101.9	101.9	101.9
Cab Sauv Res 1990 350ml Spring	185.9	185.9	185.9	185.9	185.9	185.93	185.9	185.9	185.9	185.9	185.9
Chardonnay Floral 350ml Spring	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9
Chardonnay Bareil 350ml Spring	167.9	167.9	167.9	167.9	167.9	167.93	167.9	167.9	167.9	167.9	167.9
Sauv Blanc Floral 250ml Spring	79.13	79.13	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53
Merlot Floral 250ml Spring	107.9	107.9	137.9	137.9	137.9	137.93	137.9	137.9	137.9	137.9	137.9
Spring Cab Sauv Res 750ml	180	204	204	204	204	204	204	204	204	204	210
Roma Springs Sangiovese 750ml	137.9	137.9	137.9	137.9	137.9	137.93	137.9	137.9	137.9	137.9	137.9
Spring Trilogy 1991 750ml	132	132	131.9	131.9	131.9	131.93	131.9	131.9	131.9	131.9	131.9
Spring Soliloquy 1993 750ml Franciscan	161.9	161.9	161.9	161.9	161.9	161.93	161.9	161.9	161.9	161.9	161.9
Chardonnay Oakville Estate 750ml	129.5	129.5	129.5	129.5	129.5	129.53	137.9	137.9	137.9	137.9	137.9
Franciscan Sauvage Chardonnay 250ml Franciscan	257.9	257.9	257.9	257.9	257.9	257.93	257.9	257.9	257.9	257.9	257.9
Meritage Magnificat 750ml Merlot	197.9	197.9	197.9	197.9	197.9	197.93	209.9	209.9	209.9	209.9	209.9
Oakville Estate Franciscan Zinfandel 250ml Franciscan	149.9	149.9	149.9	149.9	149.9	149.93	149.9	149.9	149.9	155.9	155.9
Cab Sauv Oakville 750ml	107.9	107.9	107.9	107.9	107.9	107.93	137.9	137.9	137.9	137.9	137.9
129.5	129.5	129.5	129.5	129.5	129.5	129.53	143.9	143.9	143.9	143.9	143.9
Gainey Vineyards Chardonnay 750ml Gainey	137.9	137.9	137.9	137.9	137.9	137.93	137.9	137.9	137.9	137.9	137.9
Vineyards Chardonnay Limited Selection 750ml	239.9	239.9	239.9	239.9	239.9	239.92	239.9	239.9	239.9	239.9	215.9
Gainey vineyards S.Dauvignoin Blanc 750ml vineyards	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	147.5
Sauv Blanc Lim Selection 750ml	147.5	147.5	147.5	147.5	147.5	147.53	147.5	147.5	147.5	147.5	147.5
Gainey vineyards Jo Barilaga 93 Gainey	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93
Vineyards Pinot Noir 750ml	173.9	173.9	173.9	173.9	173.9	173.93	173.9	173.9	173.9	173.9	173.9

Gainey Vineyards Pinot Noir Reserve 750ml Geyser peak	233.9	233.9	233.9	233.9	233.9	233.93	233.9	233.9	233.9	173.9	173.9
Reserve alexandre Geyser PEak Res Cab Sauv 750ml PEak	105	105	105	105	105	119.96	120	120	120	120	120
Chardonnay Res 1993 Geyser	92.96	92.96	92.96	92.96	92.96	113.96	114	114	114	114	114
Merlot Geyser	92.96	92.96	92.96	92.96	92.96	104.96	105	105	105	105	105
Peak Cab 89.96-51 Geyser	128.3	128.3	128.3	128.3	128.3	146.33	146.3	146.3	146.3	146.3	146.3
Peak Cab Sauv 750ml Geyser	89.96	89.96	89.96	89.96	89.96	89.96	89.96	89.96	89.96	89.96	89.96
PEak Chardonnay Geyser	104.3	104.3	104.3	104.3	113.9	128.33	128.3	128.3	128.3	128.3	128.3
PEak Sernchard 750ml	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33
Geyser PEak Sauv 750ml PEak	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33
Gainey Beaujolais 750ml Geyser	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33	74.33
Peak Sol Jo Reisling 750ml PEak Res Late	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93
Harvest Reisling 750ml Geyser	143.9	143.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9
Peak Bewuzzam 750ml PEak	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93	71.93
Premium Red 1.5l Geyser	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76
Peak Prem Red 750ml Geyser	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33
PEak Premium White 1.5l Geyser	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76	58.76
PEak Prem White 750ml Geyser	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33	62.33
Peak Shiraz vining Port Geyser	92.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33
Peak Shiraz 750ml Geyser	104.3	104.3	104.3	104.3	104.3	104.33	104.3	104.3	104.3	104.3	104.3
PEak Shiraz 750ml Geyser	92.96	92.96	138	138	138	137.96	138	138	138	138	138
Sonoma Reisling 2008 Sonoma White NV 750ml GS	77.93	77.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93
Chardonnay y Sonoma Valley 750ml Chardonnay	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93
San Jacinto Ranch 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9
	131.9	131.9	131.9	131.9	131.9	131.93	131.9	131.9	131.9	131.9	131.9

GB Gewurztraminer Rhine 750ml	77.93	77.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
GB Pinot Noir 750ml	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93
GB Merlot Rhine Farm 750ml	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93
GB Pinot Noir 750ml	107.9	107.9	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9	107.9
GB Merlot Rhine Farm 750ml	155.9	155.9	155.9	155.9	155.9	155.93	155.9	155.9	155.9	155.9	155.9	155.9
GB Pinot Noir 750ml	95.93	95.93	104.3	104.3	104.3	104.33	104.3	104.3	104.3	104.3	104.3	104.3
GB Pinot Noir 750ml	113.9	113.9	119.9	119.9	119.9	119.93	119.9	119.9	119.9	119.9	131.9	131.9
GB Cab Sauv Rhine Farm 750ml	125.9	125.9	125.9	125.9	125.9	125.93	125.9	125.9	125.9	125.9	125.9	125.9
GB Cab Sauv Rhine Farm 750ml	143.9	143.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9	153
GB Pinot Noir 750ml	287.9	287.9	287.9	287.9	287.9	287.93	287.9	287.9	287.9	287.9	287.9	287.9
Herzog Chardonnay 750ml	103.1	103.1	103.1	103.1	103.1	103.13	103.1	103.1	103.1	103.1	103.1	103.1
Herzog Sauvignon Blanc 750ml	79.13	79.13	79.13	79.13	79.13	79.13	79.13	79.13	79.13	79.13	79.13	77.93
Herzog Pinot Noir 750ml	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93
Herzog Pinot Noir 750ml	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93
Herzog Pinot Noir 750ml	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	77.93
Herzog Cabernet Sauvignon 750ml	110.3	110.3	110.3	110.3	110.3	110.33	110.3	110.3	110.3	110.3	110.3	110.3
Herzog Pinot Noir 750ml	94.79	94.79	103.1	103.1	103.1	103.13	103.1	103.1	103.1	103.1	103.1	110.3
Herzog Pinot Noir 750ml	221.9	221.9	221.9	221.9	221.9	221.93	221.9	221.9	221.9	221.9	221.9	221.9
Herzog Pinot Noir 750ml	257.9	257.9	257.9	257.9	257.9	257.93	257.9	257.9	257.9	257.9	257.9	257.9
McDowell Chardonnay 750ml	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
McDowell Pinot Noir 750ml	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93	77.93
McDowell Pinot Noir 750ml	81.53	81.53	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
McDowell Pinot Noir 750ml	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
McDowell Pinot Noir 750ml	143.9	143.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9	143.9
McDowell Pinot Noir 750ml	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
McDowell Pinot Noir 750ml	215.9	215.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9	143.9
McDowell Pinot Noir 750ml	161.9	161.9	161.9	161.9	161.9	161.93	161.9	161.9	161.9	161.9	161.9	161.9
McDowell Pinot Noir 750ml	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13

Mirasou Chardonnay Harvest Reserve 750ml	129.5	129.5	129.5	129.5	129.5	129.53	129.5	129.5	129.5	129.5	129.5
Mirasou Monterey Reserve 750ml	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53
Mirasou Chenin Reserve 750ml	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53
Mirasou Burgundy White	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56
Mirasou Burgundy Pinot Blanc	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
Mirasou Harvest Reserve 750ml	129.5	129.5	129.5	129.5	129.5	129.53	129.5	129.5	129.5	129.5	129.5
Mirasou Dry White Sauv Blanc 1.5l	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76
Mirasou Dry White Sauv Blanc White	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93
Mirasou Zinfandel White	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76	61.76
Mirasou Zinfandel 750ml	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93	65.93
Mirasou Cru Gamay 750ml	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53
Mirasou Petite Sirah 750ml	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13
Mirasou Pinot Noir Harvest Reserve	129.5	129.5	129.5	129.5	129.5	129.53	129.5	129.5	129.5	129.5	129.5
Mirasou Pinot Noir 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
Mirasou Zinfandel 750ml	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56
Mirasou Zinfandel 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
Mirasou Cab Franc 750ml	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56	78.56
Mirasou Cab Franc 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
Mirasou Cab Sauv 750ml	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13	97.13
Mirasou Cab Sauv Harvest Res 750ml	129.5	129.5	129.5	129.5	129.5	129.53	129.5	129.5	129.5	129.5	129.5
Mirasou Merlot Harvest Res 750ml	129.5	129.5	134.3	134.3	134.3	134.33	134.3	134.3	134.3	134.3	143.9
Monterey Vineyards Classic White 1.5l	43.76	43.76	43.76	43.76	43.76	43.76	49.76	49.76	49.76	49.76	49.76
Monterey Vineyards Classic White 750ml	51.53	51.53	51.53	51.53	51.53	51.53	58.73	58.73	58.73	58.73	58.73
Monterey Vineyards Classic Shardonnay 1.5l	55.76	55.76	55.76	55.76	55.76	55.76	61.76	61.76	61.76	61.76	61.76
Monterey Vineyards Classic Chardonnay 750ml	58.73	58.73	58.73	58.73	58.73	58.73	64.73	64.73	64.73	64.73	64.73
Monterey Vineyards Classic Sauv Blanc 1.5l	55.76	55.76	55.76	55.76	55.76	55.76	61.76	61.76	61.76	61.76	61.76
Monterey Vineyards Classic Sauv Blanc 750ml	58.73	58.73	58.73	58.73	58.73	58.73	64.73	64.73	64.73	64.73	64.73

Monterey Vineyards classic white zin 1.5l	52.76	52.76	52.76	52.76	52.76	52.76	57.56	57.56	57.56	57.56	57.56
Monterey Vineyards classic white zin 750ml	46.73	46.73	46.73	46.73	46.73	46.73	52.73	52.73	52.73	52.73	52.73
Monterey Vineyards Classic Red 1.5l	43.76	43.76	43.76	43.76	43.76	43.76	49.76	49.76	49.76	49.76	49.76
Monterey Vineyards Classic Red 750ml	51.53	51.53	51.53	51.53	51.53	51.53	58.73	58.73	58.73	58.73	58.73
Monterey Vineyards Classic White 1.5l	67.76	67.76	67.76	67.76	67.76	67.76	67.76	67.76	67.76	67.76	67.76
Monterey Vineyards Classic Merlot 750ml	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73
Monterey Vineyards Classic Pinot Noir 1.5l	55.76	55.76	55.76	55.76	55.76	55.76	61.76	61.76	61.76	61.76	61.76
Monterey Vineyards Classic Pinot Noir 750ml	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73
Monterey Vineyards Classic Cab Sauv 1.5l	55.76	55.76	55.76	55.76	55.76	55.76	0.76	0.76	0.76	0.76	0.76
Monterey Vineyards Cab Sauv 750ml	58.73	58.73	58.73	58.73	58.73	58.73	64.73	64.73	64.73	64.73	64.73
Moro Bay Chardonnay 750ml	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
Vedear Res 1991 750ml	347.9	347.9	347.9	347.9	347.9	347.93	347.9	348	347.9	347.9	347.9
Vedear Meritage 1990 750ml	203.9	203.9	203.9	203.9	203.9	203.93	203.9	203.9	203.9	203.9	203.9
Vedear Cab Sauv 750ml	221.9	221.9	221.9	221.9	221.9	221.93	221.9	221.9	221.9	221.9	221.9
Goode Chardonnay 750ml	105.5	105.5	110.3	110.3	110.3	110.33	110.3	110.3	110.3	110.3	110.3
MG Res Chardonnay 750ml	215.9	215.9	215.9	215.9	215.9	215.93	215.9	215.9	215.9	215.9	215.9
MG Fume blanc 750ml	86.33	86.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33	92.33
MG Res Fume 750ml	134.3	134.3	134.3	134.3	134.3	134.33	134.3	134.3	134.3	134.3	134.3
MG Pinot Blanc 750ml	116.3	116.3	116.3	116.3	116.3	116.33	116.3	116.3	116.3	116.3	116.3
MG Merlot 750ml	141.5	141.5	141.5	141.5	141.5	141.53	141.5	141.5	141.5	141.5	141.5
MG Cab Sauv 750ml	116.9	116.9	116.9	116.9	119.9	119.93	119.9	119.9	119.9	119.9	119.9
Goode-Read y Cab Sauv 750ml	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93
Goode-Read Chardonnay 1.5l	44.36	44.36	44.36	44.36	44.36	44.36	44.36	52.16	52.16	52.16	52.16
Goode-Read Vineyards Chardonnay 750ml	47.93	47.93	47.93	47.93	47.93	47.93	47.93	56.33	56.33	56.33	56.33
Goode-Read Vineyards White Zin 1.5l	44.36	44.36	44.36	44.36	44.36	44.36	44.36	49.16	49.16	49.16	49.16
Goode-Read Vineyards White Zin 750ml	47.93	47.93	47.93	47.93	47.93	47.93	47.93	53.93	53.93	53.93	53.93
Goode-Read Vineyards Merlot 750ml	63.53	63.53	63.53	63.53	63.53	63.53	63.53	63.53	63.53	63.53	68.33
Goode-Read Vineyards Cab Sauv 1.5l	44.36	44.36	44.36	44.36	44.36	44.36	44.36	52.16	52.16	52.16	52.16

Vineyards Cab Sauv 750ml	47.93	47.93	47.93	47.93	47.93	47.93	47.93	47.93	56.33	56.33	56.33	56.33
Pendroncelli White Primavera Mista 750ml	56.33	56.33	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93
Chardonnay JP Prime Blanc "Dry Creek" JP White	83.93	83.93	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53
Redding JP Dry Chenin Blanc 750ml	71.93	71.93	82.73	82.73	82.73	82.73	82.73	82.73	82.73	82.73	82.73	82.73
JP White Zin 750ml	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33
JP Zin Rose 750ml	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33
JP Red Primavera Mista 750ml	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93
JP Red Noir Dry Creek JP Pinot Basujolas 750ml	56.33	56.33	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93
JP Merlot JP Pinot Dry Creek 750ml	83.93	83.93	88.73	88.73	88.73	88.73	88.73	88.73	88.73	88.73	88.73	88.73
HJP Cab Franc 750ml	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33	56.33
Mountain Chardonnay 750ml	100.7	100.7	112.7	112.7	112.7	112.73	112.7	112.7	112.7	112.7	112.7	112.7
Mountain Cab Sauv 750ml	80.33	80.33	88.73	88.73	88.73	88.73	88.73	88.73	88.73	88.73	88.73	88.73
Mountain Cab Franc 750ml	83.53	83.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53	93.53
Mountain Merlot 750ml	173.9	173.9	173.9	173.9	173.9	173.93	173.9	173.9	173.9	173.9	173.9	173.9
Mountain Burr Cab Sauv 750ml	203.9	203.9	203.9	203.9	203.9	203.93	203.9	203.9	203.9	203.9	203.9	203.9
Redwood Canyon cab Sauv 750ml	191.9	191.9	191.9	191.9	191.9	191.93	191.9	191.9	191.9	191.9	191.9	191.9
Rombauer Chardonnay Napa 750ml	191.9	191.9	191.9	191.9	191.9	191.93	191.9	191.9	191.9	191.9	191.9	191.9
Rombauer Merlot Napa 750 ml	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9
Rombauer Cab Franc Napa 750ml	112.7	112.7	112.7	112.7	112.7	112.73	112.7	112.7	112.7	112.7	112.7	112.7
Rombauer Cab Sauv Napa 750ml	143.9	143.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9	143.9
Rombauer Cab Sauv Napa 750ml	167.9	167.9	167.9	167.9	167.9	167.93	167.9	167.9	167.9	167.9	167.9	203.9
Rombauer Cab Sauv Napa 750ml	143.9	143.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9	143.9
Rombauer Cab Sauv Napa 750ml	131.9	131.9	131.9	131.9	131.9	131.93	131.9	131.9	131.9	131.9	131.9	131.9
Calera Cab Sauv Alexander Valley 1991	272	272	272	272	272	272	272	272	272	272	272	272
Calera Cab Sauv Napa 1991	306	306	306	306	306	306	306	306	306	306	306	306
Chardonnay 1992 Sonoma	143.9	143.9	143.9	143.9	143.9	143.93	143.9	143.9	143.9	143.9	143.9	143.9
Loeb Chardonnay 1991 Sonoma	215.9	215.9	215.9	215.9	215.9	215.93	215.9	215.9	215.9	215.9	215.9	215.9
Loeb cab Sauv 89 750ml	119.9	119.9	119.9	119.9	119.9	119.93	119.9	119.9	119.9	119.9	119.9	119.9

Sterling Vineyards Chardonnay 750ml	155.9	155.9	155.9	155.9	155.9	155.93	155.9	155.9	155.9	155.9	155.9
Sterling Chardonnay 375ml	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53	75.53
Diamond Mountain Ranch Chardonnay 750ml	167.9	167.9	171.5	171.5	171.5	171.53	171.5	171.5	171.5	171.5	171.5
Sterling Winery Lake Chardonnay 750ml	167.9	167.9	171.5	171.5	171.5	171.53	171.5	171.5	171.5	171.5	171.5
Sterling Sauv Blanc 750ml	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
Sterling Sauv Blanc 375ml	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93	95.93
Sterling Cab Sauv 750ml	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73	58.73
Sterling Cab Sauv 375ml	155.9	156	155.9	155.9	155.9	155.93	155.9	155.9	155.9	155.9	155.9
Sterling Merlot 750ml	167.9	179.9	179.9	179.9	179.9	179.93	179.9	179.9	179.9	179.9	179.9
Sterling Merlot 375ml	81.53	81.53	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93	89.93
Sterling Cab Sauv 750ml	155.9	161.9	161.9	161.9	161.9	161.93	161.9	161.9	161.9	161.9	161.9
Sterling Cab Sauv 375ml	75.53	75.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
Diamond Mountain Ranch Cab Sauv 750ml	167.5	191.5	191.5	191.5	191.5	191.53	191.5	191.5	191.5	191.5	191.5
Diamond Mountain Ranch Cab Sauv 375ml	371.9	371.9	371.9	371.9	371.9	371.93	371.9	371.9	371.9	371.9	371.9
three Palms Merlot 750ml	173.9	185.9	185.9	185.9	185.9	185.93	185.9	185.9	185.9	185.9	185.9
Stonegate Winery Chardonnay Belle Vista 1991 750ml	111.5	111.5	131.9	131.9	135.9	135.93	135.9	135.9	135.9	135.9	135.9
Stonegate Sauv Blanc 1992 750ml	95.93	95.93	99.53	99.53	99.53	99.53	99.53	99.53	99.53	99.53	99.53
Stonegate Felicity white 92 750ml	53.93	53.93	53.93	53.93	53.93	53.93	53.93	53.93	53.93	53.93	53.93
Stonegate Merlot 750ml	164.3	164.3	164.3	164.3	164.3	164.33	164.3	164.3	164.3	164.3	164.3
Stonegate Cab Sauv 750ml	143.9	143.9	176.3	176.3	176.3	176.33	176.3	176.3	176.3	176.3	176.3
Stonegate Cab Franc 92 750ml	137.9	137.9	137.9	137.9	137.9	137.93	137.9	137.9	137.9	137.9	137.9
Stonegate Res Red 750ml	212.3	212.3	212.3	212.3	212.3	212.33	212.3	212.3	212.3	212.3	212.3
Stonebrook Cab Sauv 750ml	39	39	39	39	39	39	43	43	43	43	43
Stonebrook Chardonnay 750ml	39	39	39	39	39	39	43	43	43	43	43
Stonebrook White zin 750ml	33	33	33	33	33	33	36	36	36	36	36
Stonebrook Sauv Blanc 750ml	33	33	33	33	33	33	36	36	36	36	36
Taft Street Chardonnay Sonoma 92 750ml	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93

Taft Street Sauv Blanc 750ml	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93	59.93
Merlot Taft Street Cab Sauv 750ml	119.9	119.9	119.9	119.9	119.9	119.93	119.9	119.9	119.9	119.9	131.9
blanco 750ml	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	83.93	107.9
750ml	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97
Nuovo Mundo 750ml	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97	77.97
Venezia Chardonnay 750ml	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.97	86.97
Cab Sauv 750ml	102	102	102	102	102	101.97	102	102	102	102	102
Kloster-er sth Chardonnay 750ml	98.33	98.33	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9
KE Dry Gewurztrami ner 750ml	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53	81.53
KE Pinot Noir 750ml	107.9	107.9	113.9	113.9	113.9	113.93	113.9	113.9	113.9	113.9	113.9
Reserve 100-25 KE Pinot Noir Vintage Selection 750ml	182.9	182.9	193.3	193.3	193.3	193.25	193.3	193.3	193.3	193.3	193.3
KE Pinot noir Will Valley 750ml	161.9	161.9	167.9	167.9	167.9	167.93	167.9	167.9	167.9	167.9	167.9
Hogue Chardonnay 750ml	98.33	98.33	107.9	107.9	107.9	107.93	107.9	107.9	107.9	107.9	107.9
Hogue Chardonnay Res 750ml	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33	98.33
Cherin Hogue 750ml	118.7	118.7	118.7	118.7	118.7	118.73	118.7	118.7	118.7	118.7	119.9
Fume Blanc 750ml	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13
Realing 750ml	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13
Jo Realing 750ml	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13
Jo Realing 750ml	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13
ALtre Harvest Realing 750ml	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13	67.13
Semillon 750ml	79.13	79.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13	85.13
Hogue Merlot 750ml	122.3	122.3	127.1	127.1	127.1	127.13	127.1	127.1	127.1	127.1	127.1
Merlot Res 750ml	178.7	178.7	178.7	178.7	178.7	178.73	178.7	178.7	178.7	178.7	167.9
Cab Sauv 750ml	122.3	122.3	122.3	122.3	122.3	122.33	122.3	122.3	122.3	122.3	122.3
Cab Sauv Sauv Res 750ml	178.7	178.7	178.7	178.7	178.7	178.73	178.7	178.7	178.7	178.7	167.9

Firm F	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Alexander Valley Chardonnay 750ML	99.72	99.72	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
A.V. Chenin blanc 750ML	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56
A.V. Cab Sauv 1.5L	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7	170.7
A.V. Cab Sauv 750ML	139.8	139.8	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6
A.V. Res Cab Sauv 1.5L	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4
A.V. Res Cab Sauv 750ML	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6
A.V. Pinot Noir 750ML	101.4	101.4	101.4	101.4	101.4	101.4	101.4	109.2	109.2	109.2	109.2
A.V. Merlot 750ML	139.4	139.4	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6
Zinfandel 750ML	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3
Johannesberg Reisling 750ML	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
Zinf 750ML	120	120	120	120	120	120	120	133.8	133.8	133.8	133.8
A.V. Gewurtztrami 750ML	82.8	82.8	82.8	82.8	82.8	82.8	82.8	87.6	87.6	87.6	87.6
Fume Blanc Sonoma 750ML	86.8	86.8	91.8	91.8	91.8	91.8	91.8	93.6	93.6	93.6	93.6
Benziger Chardonnay Sonoma 750ML	118.2	118.2	118.2	118.2	118.2	118.2	118.2	127.4	127.4	127.4	127.4
Benziger Chardonnay Sonoma 375ML	104	104	104	104	104	104	104	104	104	104	104
Benziger Cab Sauv 750ML	118.2	118.2	118.2	118.2	118.2	118.2	118.2	127.4	127.4	127.4	127.4
Benziger Cab Sauv Estate 750ML	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78
Benziger Merlot 750ML	133.6	133.6	141.6	141.6	141.6	141.6	141.6	131.9	131.9	131.9	131.9
Tribute 750ML	215.4	215.4	215.4	215.4	215.4	215.4	215.4	215.4	215.4	215.4	215.4
White Tribute 750ML	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78
Benziger Zinfandel 750ML	134.4	134.4	134.4	134.4	134.4	134.4	134.4	145.2	145.2	145.2	145.2
Benziger Imagery Cabernet 750ML	154	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
Imagery Volinger 750ML	96	83.9	83.9	83.9	83.9	83.9	83.9	174	174	174	174
Imagery White Burgundy 750ML	190.2	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9
Imagery Pinot Noir 750ML	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
Imagery Petite Verdot 750ML	150	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
Bernardus Chardonnay 750ML	113.9	113.9	113.9	113.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9

Bernardus Chardonnay 375ML	66	66	66	66	66	66	66	66	66	66	66
Bernardus Sauvignon Blanc 750ML	83.9	83.9	83.9	83.9	83.9	102	102	102	102	102	102
Bernardus Semillon 750ML	90	90	90	90	90	90	90	90	90	90	90
Byron Chardonnay Santa Barbara 750ML	152.2	152.2	138	138	138	138	138	144	144	144	144
Byron Chardonnay Estate 750ML	209.4	209.4	240	240	240	240	240	240	240	240	240
Byron Sauvignon Blanc 750ml	101.3	101.3	101.3	101.3	101.3	101.3	101.3	96	96	96	96
Byron Pinot Noir 750ml	152.2	152.2	144	144	144	144	144	144	144	144	144
Byron Chardonnay 750ml	213.6	213.6	192	192	192	192	192	192	192	192	192
Byron Pinot Noir 750ml	213.6	213.6	192	192	192	192	192	192	192	192	192
Byron Cab blend 750ml	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2
Chateau St Jean Chardonnay Robert Young 750ml	267.6	267.6	267.6	267.6	267.6	267.6	267.6	267.6	267.6	267.6	267.6
Chateau St Jean Cabernet Sauvignon Reserve 750ml	236.8	236.8	236.8	236.8	236.8	237	237	237	237	237	236.8
CSJ Chardonnay Belle Terre 750ml	182.9	182.9	182.9	182.9	182.9	201.6	201.6	201.6	201.6	201.6	182.9
CSJ Chardonnay Sonoma 1.5L	112	112	112	112	112	112	112	112	112	112	112
CSJ Chardonnay Sonoma 750ml	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3
CSJ Chardonnay Sonoma 750ml	70.44	70.44	70.44	70.44	70.44	70.44	70.44	70.44	70.44	70.44	70.44
CSJ Pinot Noir Sonoma 750ml	95.16	95.16	95.16	95.16	95.16	97.4	97.4	97.4	97.4	97.4	97.4
CSJ Pinot Noir Sonoma 750ml	130.6	130.6	130.6	130.6	130.6	130.8	130.8	130.8	130.8	130.8	130.8
CSJ Pinot Noir Sonoma 750ml	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72
CSJ Pinot Noir Sonoma 750ml	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2	219.2
CSJ Pinot Noir Sonoma 750ml	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72	99.72
CSJ Pinot Noir Sonoma 750ml	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
CSJ Pinot Noir Sonoma 750ml	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9
CSJ Pinot Noir Sonoma 750ml	152.2	152.2	152.2	152.2	152.2	174.6	174.6	174.6	174.6	174.6	174.6
CSJ Pinot Noir Sonoma 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
CSJ Pinot Noir Sonoma 750ml	32	32	32	32	32	32	32	32	32	32	32

Cisco Black Cherry 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
Cisco black Cherry 375ml	32	32	32	32	32	32	32	32	32	32	32
Cisco Berry 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
Cisco Berry 375ml	32	32	32	32	32	32	32	32	32	32	32
Cisco Orange 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
Cisco Orange 375ml	32	32	32	32	32	32	32	32	32	32	32
Cisco Perach 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
Cisco peach 375ml	32	32	32	32	32	32	32	32	32	32	32
Cisco Strawberry 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
Cisco Strawberry 375ml	32	32	32	32	32	32	32	32	32	32	32
Cisco Citrus 750ml	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75	27.75
Cisco Citrus 375ml	32	32	32	32	32	32	32	32	32	32	32
Caribbean Sunset 750ml	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15
Cisco Sunset 375ml	30	30	30	30	30	30	30	30	30	30	30
Cisco sunset 375ml	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24
Bahama Bagg 750ml	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15
Bahama Bagg 375ml	30	30	30	30	30	30	30	30	30	30	30
Bahama Berry 187ml	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96
Cisco Island Strawberry 750ml	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15
Cisco Island Strawberry 375ml	30	30	30	30	30	30	30	30	30	30	30
Cisco Island Strawberry 187ml	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24	12.24
Cisco tropical tangerine 750ml	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15	22.15
Cisco tropical tangerine 375ml	30	30	30	30	30	30	30	30	30	30	30
Cisco tropical tangerine 187ml	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96	12.96
Colony box wine portotaps burgundy SI	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52
portotaps white grenache SI	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52
Colony portotaps chablis SI	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52
portotaps blush chablis SI	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52
Colony portotaps rhineheller SI	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52	34.52
Colony white zin SI	50.48	50.48	50.48	50.48	54.96	54.96	54.96	54.96	54.96	54.96	54.96
Cooks Cab Sauv 1.5l	43.92	43.92	43.92	43.92	49.8	49.8	49.8	49.8	49.8	49.8	49.8

Cooks Cab Sauv 750ml	62.76	62.76	62.76	62.76	54	54	54	54	54	54	54
Cooks Chardonnay 1.5l	43.92	43.92	43.92	43.92	49.8	49.8	49.8	49.8	49.8	49.8	49.8
Cooks Chardonnay 750ml	62.76	62.76	62.76	62.76	54	54	54	54	54	54	54
Cooks Merlot 1.5l	43.92	43.92	43.92	43.92	49.8	49.8	49.8	49.8	49.8	49.8	49.8
Cooks Merlot 750ml	62.76	62.76	62.76	62.76	54	54	54	54	54	54	54
Cooks white Zin 1.5l	35.4	35.4	35.4	35.4	39	39	39	39	39	39	39
cooks white Zin 750ml	53.52	53.52	53.52	53.52	49.8	49.8	49.8	49.8	49.8	49.8	49.8
cooks Sauv Blanc 1.5l	35.4	35.4	35.4	35.4	39	39	39	39	39	39	39
Cooks Sauv Blanc 750ml	53.52	53.52	53.52	53.52	49.8	49.8	49.8	49.8	49.8	49.8	49.8
Corbett Chardonnay 1.5l	43.2	43.2	43.2	43.2	47.9	47.9	47.9	47.9	47.9	47.9	47.9
Corbett Chardonnay 7l	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
Corbett Chardonnay 750ml	54.64	54.64	54.64	54.64	63.4	63.4	63.4	63.4	63.4	63.4	63.4
Corbett Sauv Blanc 750ml	42	42	42	42	39.55	39.55	39.55	39.55	39.55	39.55	39.55
White Zin 1.5l	32.4	32.4	32.4	32.4	39.55	39.55	39.55	39.55	39.55	39.55	39.55
White Zin 1.5l	49.18	49.18	49.18	49.18	49.18	49.18	49.18	49.18	49.18	49.18	49.18
White Zin 750ml	42	42	42	42	50.3	50.3	50.3	50.3	50.3	50.3	50.3
Corbett Cab Sauv 1.5l	43.2	43.2	43.2	43.2	47.9	47.9	47.9	47.9	47.9	47.9	47.9
Corbett Cab Sauv 7l	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
Corbett Cab Sauv 750ml	56.64	56.64	56.64	56.64	63.4	63.4	63.4	63.4	63.4	63.4	63.4
Corbett Chardonnay res 1.75l	43.2	43.2	43.2	43.2	47.9	47.9	47.9	47.9	47.9	47.9	47.9
Corbett Chardonnay res 750ml	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36
Corbett Merlot 750ml	69	69	69	69	63.4	63.4	63.4	63.4	63.4	63.4	63.4
Corbett Sauv Blanc res 750ml	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76
Corbett Cab Sauv res 750ml	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36
Corbett Pinot noir Res 750ml	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36	84.36
Corbett Red Table 1.5l	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
Cribari Box Cab Sauv 5l	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
Cribari box White Zin 5l	50.6	50.6	50.6	50.6	50.6	50.6	48.96	48.96	48.96	48.96	48.96
Cribari Easy pour bones Country 1.5l	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64
Cribari Easy pour box blush chablis 1.5l	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64
Cribari easy pour box burgundy 1.5l	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64

criberi easy pour box vin rose 1.5l	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64
criberi easy pour box rhine 1.5l	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64
criberi easy pour box chablis 1.5l	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64	38.64
criberi easy pour box white zin 1.5l	48.96	48.96	48.96	48.96	48.96	48.96	48.96	48.96	48.96	48.96	48.96	48.96
criberi table chablis 3l	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44
criberi table shibla 1.5l	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
criberi table burgundy 3l	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44
criberi table rose 1.5l	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
criberi table bleu chablis 3l	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44
criberi table chianti 3l	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44
criberi table chianti 1.5l	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
criberi table vino bianco 3l	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44	30.44
criberi cab sauv 1.5l	40.8	40.8	40.8	40.8	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
criberi cab sauv 750ml	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64
criberi chardonnay 1.5l	40.8	40.8	40.8	40.8	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
criberi chardonnay 750ml	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64
criberi charin blanc 1.5l	40.8	40.8	40.8	40.8	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
criberi white zin 1.5l	40.8	40.8	40.8	40.8	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
criberi white zin 750ml	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64
criberi sauv blanc 1.5l	40.8	40.8	40.8	40.8	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
criberi sauv blanc 750ml	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64
criberi zin 1.5l	40.8	40.8	40.8	40.8	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
criberi rest ree burgundy 18l	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65
criberi rest chablis 18l	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65	38.65
criberi rest chablis 3l	36	36	36	36	36	36	36	36	36	36	36	36
criberi rest chianti 18l	46	46	46	46	46	46	46	46	46	46	46	46
criberi madeira 1.5l	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04
criberi madeira 750ml	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16
criberi marsala 1.5l	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04
criberi marsala 750ml	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16
criberi sherry 1.5l	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04	38.04
criberi sherry 750ml	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16	41.16
david bruce cab sauv 750ml	134.4	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
david bruce pinot noir 750ml	141.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4

david bruce pinot noir estate 750ml	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8
david bruce mayley chardonnay 750ml	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6
david bruce estate chardonnay 285ml	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6
david bruce zinfandel 750ml	133.7	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9	104.9
david bruce petite sirah 285ml	133.7	104.9	104.9	104.9	115.2	115.4	115.4	115.4	115.4	115.4	124.8	124.8
dry creek cab sauv 750ml	149	149	149	149	149	162	162	162	162	162	162	162
dry creek cab sauv 285ml	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	88.8
dry creek cab sauv res 750ml	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	226.2	226.2	226.2	226.2
dry creek chardonnay 750ml	118.2	118.2	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8
dry creek chardonnay 375ml	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3
dry creek chardonnay 375ml(12pk)	57.12	57.12	57.12	57.12	57.12	57.12	57.12	57.12	57.12	57.12	57.12	57.12
dry creek chardonnay res 750ml	142.8	142.8	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4
dry creek chenin blanc 285ml	68.8	68.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
dry creek fume blanc 285ml	93.6	93.6	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2
dry creek fume blanc 285ml	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52
dry creek meritage 750ml	182.9	182.9	182.9	182.9	182.9	182.9	182.9	182.9	207.6	207.6	207.6	207.6
dry creek merlot 750ml	152.4	152.4	152.4	152.4	152.4	162	162	162	162	162	162	162
dry creek merlot 375ml	83.76	83.76	83.76	83.76	83.76	83.76	83.76	83.76	83.76	83.76	83.76	83.76
dry creek zinfandel 285ml	135.1	135.1	135.1	135.1	135.1	143.4	143.4	143.4	143.4	143.4	143.4	143.4
dry creek reserve zinfandel 750ml	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6
dry creek meritage 3l	182.9	182.9	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6
dry creek res fume blanc 750ml	139.4	139.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4
dry creek soleil 375ml	150	150	150	150	150	150	150	150	150	150	150	150
dry creek estate merlot 750ml	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6
dunnewood north coast chardonnay 285ml	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96
dunnewood cal cab sauv 1.5l	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6	66.6
dunnewood cal cab sauv 750ml	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96
dunnewood alexander valley cab sauv 1.5l	66.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6

dunnewood calif sauv blanc 1.5l	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96
dunnewood calif sauv blanc 750ml	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76
dunnewood white zin 750ml	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76
Dunnewood merlot 750ml	81	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
dunnewood pinot noir 750ml	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96	78.96
dunnewood gamay beaurotais 750ml	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76	62.76
dunnewood zinfandel 750ml	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
dunnewood carneros chardonnay 750ml	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
eberle chardonnay 750ml	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7	115.7
eberle cab sauv 750ml	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4
eberle cab sauv 750ml	263.4	263.4	263.4	263.4	263.4	263.4	263.4	263.4	263.4	263.4	263.4
eberle muscat 750ml	87.36	87.36	87.36	87.36	87.36	87.36	87.36	87.36	87.36	87.36	87.36
eberle zinfandel 750ml	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4
eberle syrah 750ml	152.2	152.2	152.2	152.2	131.9	131.9	131.9	131.9	131.9	131.9	131.9
eberle cotes du robes 750ml	124.8	124.8	124.8	124.8	149.9	149.9	149.9	149.9	149.9	149.9	149.9
expressions chardonnay 750ml	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
expressions cab sauv 750ml	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
expressions zinfandel 750ml	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
expressions merlot 750ml	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9
expressions sangiovese 750ml	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9
expressions viognier 375ml	41.96	41.96	41.96	41.96	41.96	41.96	41.96	41.96	41.96	41.96	41.96
foppiano chardonnay 750ml	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88
foppiano sauv blanc 750ml	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88	89.88
foppiano cab sauv 750ml	98.4	98.4	98.4	98.4	106.4	106.4	106.4	106.4	106.4	119.9	119.9
foppiano petite sirah 750 ml	98.4	98.4	98.4	98.4	106.4	106.4	106.4	106.4	106.4	119.9	119.9
foppiano res petite sirah 750ml	169	169	169	169	169	169	169	169	169	169	169
foppiano res petite sirah 750ml (91)	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6
foppiano zinfandel 750ml	98.4	98.4	98.4	98.4	118.3	118.3	118.3	118.3	118.3	119.9	119.9
foppiano merlot 750ml	104.4	104.4	104.4	104.4	135.9	135.9	135.9	135.9	135.9	135.9	135.9
foppiano sauv blanc 750ml	102	102	102	102	102	102	102	102	102	102	102
foppiano cab sauv 750ml	162	162	162	162	162	162	162	162	162	162	162

frogs leap zin 750ml	126	126	126	126	126	126	126	126	126	126	126
frogs leap chardonnay 750ml	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3
frogs leap merlot 750ml	162	162	162	162	162	162	162	162	162	180	180
late leap 375ml	138	138	138	138	138	138	138	138	138	138	138
glen ellen chardonnay 1.5l	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
glen ellen chardonnay 750ml	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85
glen ellen chardonnay 187ml	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58
glen ellen shiraz 1.5l	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
glen ellen white 750ml	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88
glen ellen red 1.5l	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
glen ellen red 750ml	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88	44.88
glen ellen york 1.5l	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45
shiraz zin 750ml	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04
shiraz zin 187ml	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58
glen ellen sauv blanc 1.5l	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45
glen ellen sauv blanc 750ml	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04
glen ellen sauv blanc 187ml	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58
glen ellen cab sauv 1.5l	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
cab sauv 750ml	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85
cab sauv 187ml	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58
glen ellen gamay beaujolais 1.5l	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45
glen ellen gamay beaujolais 750ml	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04	59.04
glen ellen gamay beaujolais 187ml	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58	35.58
glen ellen merlot 1.5l	68.55	68.55	68.55	68.55	68.55	68.55	68.55	68.55	68.55	68.55	68.55
glen ellen merlot 750ml	83.25	83.25	83.25	83.25	83.25	83.25	83.25	83.25	83.25	83.25	83.25
glen ellen chenin blanc 750ml	55.08	55.08	55.08	55.08	55.08	55.08	55.08	55.08	55.08	55.08	55.08
glen ellen fume blanc 1.5l	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68	63.68
glen ellen fume blanc 750ml	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85	65.85
honig estate sauv blanc 750 ml	148.6	148.6	148.6	148.6	148.6	106.4	106.4	106.4	106.4	106.4	106.4
honig estate cab sauv 750ml	144.8	144.8	144.8	144.8	171	171	171	171	171	171	171
Colony port 5l	33	33	33	33	33	33	33	33	33	33	33
ISC port 1.5l	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75

ISC Port 750ml	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC white port 3l	33	33	33	33	33	33	33	33	33	33	33
ISC white port 1.5l	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC white port 750ml	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC White port 375ml	31	31	31	31	31	31	31	31	31	31	31
ISC str Sherry 3l	33	33	33	33	33	33	33	33	33	33	33
ISC Str Sherry 1.5l	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC Str sherry 750ml	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC Muscatel 3l	33	33	33	33	33	33	33	33	33	33	33
ISC muscatel 1.5l	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC muscatel 750ml	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
ISC muscatel 375ml	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75	29.75
Phelps Chardonnay carneros Valley 750ml	161.3	161.3	161.3	161.3	161.4	161.4	161.4	161.4	161.4	161.4	161.4
Chardonnay carneros valley 375ml	85.32	85.32	85.32	85.32	85.32	85.32	85.32	85.32	85.32	85.32	85.32
JP Sauv Blanc 750ml	124.8	124.8	124.8	124.8	124.8	124.8	124.8	124.8	124.8	124.8	124.8
Resling 750ml	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3	101.3
JP Cab Sauv 750ml	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6
JP cab sauv 375ml	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7
JP Cab Sauv 375ml	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7	100.7
Backus 750ml	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2
JP Insignia 750ml 1999	447.7	447.7	447.7	447.7	447.7	324	324	324	324	324	324
JP Insignia 750ml 1999	188	188	188	188	188	188	188	188	188	188	188
JP Grenach Rose Mistral 750ml	106	106	106	106	115.4	119.4	119.4	119.4	119.4	119.4	119.4
JP Vlogner Mistral 750ml	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2
JP Le mistral 750ml	142.8	142.8	142.8	142.8	143.4	143.4	143.4	143.4	143.4	143.4	143.4
JP Gewurztrami ner 750ml	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
JP Merlot 750ml	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6	207.6
JP Ovation Chardonnay 750ml	240	240	240	240	240	240	240	240	240	246	246
Justin Chardonnay 750ml	143.9	143.9	143.9	143.9	143.9	143.9	143.9	143.9	143.9	144.6	144.6
Justin leocleles 750ml	247.6	247.6	247.6	247.6	120	120	120	120	120	120	120
Justin Cab Franc 750ml	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	204.6	204.6
Justin merlot 750ml	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5
Justin justification 750ml	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5	207.5
Justin epoch chardonnay 750ml	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
Justin epoch cab sauv 750ml	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2	103.2	127.9	127.9

lake spring chardonnay 750ml	84.6	84.5	84.5	84.5	84.6	84.6	84.6	84.6	84.6	118.3	118.3
lake spring sauv blanc 750ml	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	100.7	100.7
lake spring cab sauv res 750ml	152	152	152	152	152	152	152	152	152	152	152
lake spring pinot 750ml	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
lake spring zinfandel 750ml	170.6	170.6	170.6	170.6	192	192	192	192	192	192	192
lyeth red 750ml	131	131	131	131	131	131	131	131	131	131	131
lyeth white 750ml	74	74	74	74	74	90.6	90.6	90.6	90.6	90.6	90.6
lyeth chardonnay 750ml	118	118	118	118	118	118	118	118	118	118	118
chardonnay 1.5l	89.82	61.85	61.85	61.85	69.4	69.4	69.4	69.4	69.4	69.4	69.4
chardonnay 750ml	89.82	70.4	70.4	70.4	76.95	76.95	76.95	76.95	76.95	76.95	76.95
vallejo cab sauv 1.5l	89.82	61.85	61.85	61.85	69.4	69.4	69.4	69.4	69.4	69.4	69.4
vallejo cab sauv 750ml	89.82	70.4	70.4	70.4	76.5	76.5	76.5	76.5	76.5	76.5	76.5
vallejo white zinf 1.5l	68.22	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45
vallejo white zinf 750ml	68.22	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
vallejo fume blanc 1.5l	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9
vallejo fume blanc 750ml	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52	53.52
vallejo merlot 1.5l	89.82	69.05	69.05	69.05	71.95	71.95	71.95	71.95	71.95	71.95	71.95
vallejo merlot 750ml	106.5	85.4	85.4	85.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
vallejo pinot noir 750ml	68.22	85.4	85.4	85.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
vallejo sauv blanc 1.5l	68.22	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45
vallejo sauv blanc 750ml	68.22	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
donner 750ml	89.82	70.4	70.4	70.4	76.95	76.95	76.95	76.95	76.95	76.95	76.95
manischewitz cab sauv 1.5l	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
chardonnay 1.5l	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
man white zinf 1.5l	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
man concord 3l	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
man concord 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
man concord 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
man concord select 1l	45	45	45	45	45	45	45	45	45	45	45
man blackberry 3l	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5	38.5
blackberry 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
blackberry 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8
man cherry 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
man cherry 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
man med dry concord 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
concord 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
man malaga 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
man malaga 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
loganberry 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
elderberry 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
red concord 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
red concord 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
white concord 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25
concord 750ml	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
blush concord 1.5l	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25	33.25

concord	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	37.8	37.8
750ml chardonnay	158.3	158.3	158.3	158.3	158.3	158.3	158.3	158.4	158.4	158.4	158.4
750ml morge sau	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
blanc 750ml	158.3	158.3	158.3	158.3	158.4	158.4	158.4	158.4	158.4	158.4	158.4
morgan pinot	247.6	247.6	247.6	247.6	227.9	227.9	227.9	227.9	227.9	227.9	227.9
750ml monterey	213.7	213.7	213.7	213.7	213.7	213.7	213.7	213.7	213.7	214.2	214.2
chardonnay	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
res 750ml	235.2	235.2	235.2	235.2	227.9	227.9	227.9	227.9	227.9	227.9	227.9
morgan cab	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
sauv 750ml	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6
canvce	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
750ml zinfandel	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2	122.2
750ml viogner	85.8	85.8	85.8	85.8	99.6	85.8	85.8	85.8	85.8	85.8	85.8
750ml merlot	85.8	85.8	85.8	85.8	95.4	85.8	85.8	85.8	85.8	85.8	85.8
750ml chardonnay	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
750ml (15pk)	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
perducci cab	85.8	85.8	85.8	85.8	95.4	85.8	85.8	85.8	85.8	85.8	85.8
sauv 750ml	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
sauv 750ml	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
(15pk)	85.8	85.8	85.8	85.8	99.6	85.8	85.8	85.8	85.8	85.8	85.8
pinot noir	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
750ml pinot noir	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
750ml (15pk)	68.88	68.88	68.88	68.88	79.8	68.88	68.88	68.88	68.88	68.88	68.88
gewurztramin	68.88	68.88	68.88	68.88	79.8	68.88	68.88	68.88	68.88	68.88	68.88
er 750ml	68.88	68.88	68.88	68.88	79.8	68.88	68.88	68.88	68.88	68.88	68.88
sauv blanc	47.34	47.34	47.34	47.34	48.9	47.34	47.34	47.34	47.34	47.34	47.34
750ml white	47.34	47.34	47.34	47.34	48.9	47.34	47.34	47.34	47.34	47.34	47.34
zinfandel 1.5l	68.88	68.88	68.88	68.88	79.8	68.88	68.88	68.88	68.88	68.88	68.88
zinfandel	85.8	85.8	85.8	85.8	79.8	85.8	85.8	85.8	85.8	85.8	85.8
750ml petite sirah	68.88	68.88	68.88	68.88	69	68.88	68.88	68.88	68.88	68.88	68.88
750ml basujokis	45	45	45	45	46.8	46.8	46.8	46.8	46.8	46.8	46.8
750ml white table	45	45	45	45	46.8	46.8	46.8	46.8	46.8	46.8	46.8
1.5l perducci red	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
table 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
white	35.57	35.57	35.57	35.57	35.57	35.57	35.57	35.57	35.57	35.57	35.57
gronache 3l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM white	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
greence 1.5l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Chablis	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
3l	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
PM chablis	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Chablis	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
750ml	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM KLight	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
Chablis 3l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM light	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
chablis 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM blush	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
chablis 3l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM blush	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
chablis 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Rhine 3l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Rhine	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
1.5l	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
PM rhine	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
750ml	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Light	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
Rhine 1.5l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Rhine	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
Castle 3l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Rhine	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
castle 1.5l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Emerald	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
Dry 3l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Emerald	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
Dry 1.5l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM Chenin	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
Blanc 3l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM chenin	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
Blanc 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
oetombard											
1.5l											

PM white	35.96	35.96	35.96	35.96	40.2	40.2	40.2	40.2	40.2	40.2	40.2
zinfandel 1.5l	29.96	29.96	29.96	29.96	35.96	35.96	35.96	35.96	35.96	35.96	35.96
white	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
zinfandel 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Rose 3l	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
PM Rose 1.5l	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
PM rose	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
750ml	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Light	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
Rose 3l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM light	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
Rose 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Vin Rose	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
SEC 3l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Vin rose	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Light	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
burgundy 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Burgundy	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37	35.37
3l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
PM Burgundy	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
1.5l	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
PM Burgundy	33.48	33.48	33.48	33.48	36.9	36.9	36.9	36.9	36.9	36.9	36.9
750ml	33.48	33.48	33.48	33.48	36.9	36.9	36.9	36.9	36.9	36.9	36.9
chardonnay	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73
1.5l	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
PM VS Sauv	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
Blanc 1.5l	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
PM VS White	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73	52.73
Zinfandel 1.5l	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
PM VS white	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
Zin 750ml	44.96	44.96	44.96	44.96	44.4	44.4	44.4	44.4	44.4	44.4	44.4
PM VS	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
merlot 1.5l	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
PM VS	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
Zinfandel 1.5l	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
750ml	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
PM VS Cab	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Sauv 1.5l	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
Chardonnay	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
lter	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Casale	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
chablis lter	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Chablis	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
750ml	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
chenin blanc	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
lter	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Colombard	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
lter	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Casale Rhine	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
lter	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Casale Rose	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
lter	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
Casale Rose	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
375ml	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Casale white	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
zinfandel lter	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
carafge	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
burgundy lter	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
burgundy	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
375ml	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93	41.93
Sauvignon	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06	49.06
lter	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
table carafe	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
lter	96	96	96	96	96	96	96	96	96	96	96
PM rest pack	56	56	56	56	56	56	56	56	56	56	56
chablis 58.6l	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
PM rest pack	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
chablis 30l	132	132	132	132	132	132	132	132	132	132	132
Chablis	78	78	78	78	78	78	78	78	78	78	78
18(E-Z Sav)	46	46	46	46	46	46	46	46	46	46	46
Chablis 4L	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
glass	96	96	96	96	96	96	96	96	96	96	96
shile zin 58.6	56	56	56	56	56	56	56	56	56	56	56
l	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
winters sel	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
white zin 30l	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
zin 18(E-Z	56	56	56	56	56	56	56	56	56	56	56
Sav)	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
select white	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
zin 18l loggie	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
PM rest pack	56	56	56	56	56	56	56	56	56	56	56
Rose 58.6l	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
PM rest pack	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
rose 30l	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
rose	56	56	56	56	56	56	56	56	56	56	56
18(E-Z Sav)	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
PM rest pack	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
rose 18l box	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
PM rest pack	56	56	56	56	56	56	56	56	56	56	56
rose 4l	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
PM rest pack	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
burgundy 30l	56	56	56	56	56	56	56	56	56	56	56

PM rest pack	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
18l (E-Z serv)											
PM rest pack	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
burgundy 4l											
PM rest pack	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3	38.3
Rhine 4l											
zinfandel 18l	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
(E-Z serv)											
pack white	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
zin 18l box											
/Cuvee de	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
fume 750ml											
Preston Cab	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6	133.6
Sauv 750ml											
Barbera		136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.7	146.4	146.4
750ml											
Preston	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	171
Syrah 750ml											
zingandel	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	133.8	133.8
750ml											
Beaujolais	78.12	78.12	78.12	78.12	78.12	78.12	78.12	78.12	78.12	78.12	78.12
750ml											
Estate red	64.32	64.32	64.32	64.32	64.32	64.32	64.32	64.32	64.32	64.32	64.32
750ml											
reserve	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
750ml											
Preston fauz	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
750ml											
vogner	170.5	170.5	170.5	170.5	189.6	189.6	189.6	189.6	189.6	189.6	189.6
750ml											
marianne	152.7	152.7	152.7	152.7	152.7	171	171	171	171	171	171
750ml											
starboard	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4
port 750ml											
Quady	84.42	84.42	84.42	84.42	84.42	84.42	84.42	84.42	84.42	84.42	84.42
electa 750ml											
essensis	146.5	146.5	146.5	146.5	146.5	154.2	154.2	154.2	154.2	154.2	154.2
750ml											
essensis	85.8	85.8	85.8	85.8	85.8	88.8	88.8	88.8	88.8	88.8	88.8
375ml											
Elysium	146.5	146.5	146.5	146.5	146.5	154.2	154.2	154.2	154.2	154.2	154.2
750ml											
Elysium	85.8	85.8	85.8	85.8	85.8	88.8	88.8	88.8	88.8	88.8	88.8
375ml											
Quady LSV	115.8	115.8	115.8	115.8	115.8	115.8	115.8	121.8	121.8	121.8	121.8
port 750ml											
cab sauv	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	137.9	149.9	149.9
750ml											
gregory cab	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	191.9	204	204
sauv 750ml											
zinfandel	216	216	216	216	216	216	216	216	216	216	216
750ml											
zinfandel	216	216	216	216	216	216	216	216	216	216	216
750ml											
pickberry	162	162	162	162	162	162	162	162	162	162	162
750ml											
winther's	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
blend 750ml											
sonoma	144	144	144	144	144	144	144	144	144	144	144
750ml											
zinfandel	120	120	120	120	120	120	120	120	120	120	120
750ml											
napa 750ml	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1
reverwood											
merlot 750ml	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9	113.9
blend merlot											
750ml	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9	125.9
mountain											
claret 750ml	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9
sauv yrot											
creek 750ml	131.9	131.9	131.9	131.9	131.9	131.9	174	174	174	174	174
sauv sein											
cruz 750ml	174	174	174	174	174	174	174	174	174	174	174
santa cruz											
750ml	170.6	170.6	170.6	170.6	144	144	144	144	144	144	144
ridge merlot											
750ml	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9	131.9
york creek											
750ml	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9
geyerville											
750ml	180	180	180	180	180	180	180	180	180	180	180
geyerville											
375ml	173.9	173.9	173.9	173.9	173.9	173.9	173.9	173.9	173.9	173.9	173.9
zinfandel											
pagani 750ml	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6
lyon springs											
750ml	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9
eyrak, york											
creek 750ml	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9
montebello											
750ml 1988	323.9	323.9	323.9	323.9	323.9	323.9	323.9	323.9	323.9	323.9	323.9
montebello											
750ml 1989	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9	149.9
bradford											
750ml	71.22	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	82.75	82.75
woodbridge											
cab sauv 1.5l											

cab sauv	81.72	82	82	82	82	82	82	82	82	82	82
750ml	42.48	42.48	42.48	42.48	42.48	42.48	42.48	42.48	42.48	42.48	42.48
cab sauv	52.74	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	61.15	61.15
375ml	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
sauf blanc	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96	51.96
1.5l	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04
sauf blanc	71.22	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2	82.75	82.75
750ml	81.72	82	82	82	82	82	82	82	82	82	82
chardonnay	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64
750ml	52.74	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	61.15	61.15
chenin blanc	56.64	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
750ml	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	61.15	61.15
red zinfandel	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
1.5l	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04	35.04
red zinfandel	272.4	272.4	272.4	272.4	272.4	272.4	272.4	272.4	272.4	272.4	272.4
750ml	172.2	172.2	172.2	172.2	172.2	172.2	172.2	129	129	129	129
white	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36
zinfandel 1.5l	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2
zinfandel	114	114	114	114	114	114	114	114	114	114	114
750ml	63.12	63.12	63.12	63.12	63.12	63.12	63.12	63.12	63.12	63.12	63.12
zingandel	201.4	201.4	201.4	201.4	201.4	201.4	201.4	201.4	201.4	201.4	201.4
375ml	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2
chardonnay	70.65	70.65	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
res 750ml	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
chardonnay	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4	188.4
750ml	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6
chardonnay	75.72	75.72	75.72	75.72	75.72	75.72	75.72	75.72	75.72	75.72	75.72
750ml	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6	204.6
chardonnay	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2
750ml	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2	176.2
chardonnay	90.24	90.24	90.24	90.24	90.24	90.24	90.24	90.24	90.24	90.24	90.24
750ml	196.8	196.8	196.8	196.8	196.8	201.6	201.6	201.6	201.6	201.6	201.6
chardonnay	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8	103.8
750ml	120	120	120	120	120	120	120	120	120	120	120
chardonnay	540	540	540	540	540	540	540	540	540	479.9	479.9
750ml	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6	532.6
chardonnay	512.4	512.4	512.4	512.4	512.4	512.4	512.4	512.4	512.4	512.4	512.4
750ml	142	142	142	142	142	142	142	142	142	142	142
chardonnay	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
750ml	324	324	324	324	324	324	324	324	324	324	324
chardonnay	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5	281.5
750ml	167.4	167.4	167.4	167.4	167.4	167.4	167.4	167.4	167.4	167.4	167.4
chardonnay	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
750ml	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2
chardonnay	244.6	244.6	244.6	244.6	244.6	244.6	244.6	244.6	244.6	244.6	244.6
750ml	216.8	216.8	216.8	216.8	216.8	216.8	216.8	95.95	95.95	95.95	95.95
chardonnay	170.6	170.6	170.6	170.6	77.95	77.95	77.95	77.95	77.95	77.95	77.95
750ml	152.2	152.2	152.2	152.2	152.4	152.4	152.4	152.4	152.4	152.4	152.4

zinfandel	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2	124.2
750ml muscat	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
375ml black muscat	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
375ml vintage port	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
750ml cab sauv	93.6	93.6	93.6	93.6	93.6	93.6	93.6	97.2	97.2	97.2	97.2
750ml zingiovese	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72
750ml rhone rouge	78.24	78.24	78.24	78.24	78.24	78.24	78.24	78.24	78.24	78.24	78.24
750ml zinfandel	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72
750ml viognier	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96
750ml zinfandel	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96	72.96
375ml zinfandel	81.24	81.24	81.24	81.24	81.24	81.24	81.24	87.6	87.6	87.6	87.6
750ml sauv blanc	73.8	73.8	73.8	73.8	79.9	79.9	79.9	79.9	79.9	79.9	79.9
750ml sangiovese	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72
750ml mustact	97.2	97.2	97.2	97.2	97.2	97.2	97.2	106.2	106.2	106.2	106.2
750ml black muscat	97.2	97.2	97.2	97.2	97.2	97.2	97.2	106.2	106.2	106.2	106.2
750ml winery petite	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6
750ml stah 750ml	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6
750ml chardonnay	217.2	217.2	217.2	217.2	217.2	217.2	217.2	217.2	217.2	226.2	226.2
750ml cab sauv	217.2	217.2	217.2	217.2	217.2	217.2	217.2	217.2	217.2	226.2	226.2
750ml stags leap	217.2	217.2	217.2	217.2	217.2	217.2	217.2	217.2	217.2	226.2	226.2
750ml merlot 750ml	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml chern blanc	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml SC Dry	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml reeling 750ml	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36	96.36
750ml SC LH	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml reeling 750ml	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml gawuczbamie	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml SC jo reeling	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml idaho 750ml	62.25	62.25	62.25	62.25	62.25	62.25	62.25	62.25	62.25	62.25	62.25
750ml SC jo reeling	66	66	66	66	66	66	66	66	66	66	66
750ml cab sauv	109.8	109.8	109.8	109.8	62.04	62.04	62.04	62.04	62.04	62.04	62.04
750ml cab sauv	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4	180.4
750ml idaho 750ml	109.8	109.8	109.8	109.8	119.9	119.9	119.9	119.9	119.9	119.9	119.9
750ml reserve	66	66	66	66	80.9	80.9	80.9	80.9	80.9	80.9	80.9
750ml SC merlot	109.8	109.8	109.8	109.8	111.9	111.9	111.9	111.9	111.9	111.9	111.9
750ml canyon	66	66	66	66	66	66	66	66	66	66	66
750ml chardonnay	109.8	109.8	109.8	109.8	66	66	66	66	66	66	66
750ml SC kume	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72	96.72
750ml blanc 750ml	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
750ml Sobon estate	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4
750ml syrah 750ml	123	123	123	123	123	123	123	123	123	123	123
750ml Sobon rose	64	64	64	64	64	64	64	64	64	64	64
750ml syrah 750ml	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8	189.8
750ml zinfandel	102.8	102.8	102.8	102.8	111.3	111.3	111.3	111.3	111.3	111.3	111.3
750ml chardonnay	180	180	180	180	180	180	180	180	180	195	195
750ml chardonnay	90.46	90.46	90.46	90.46	90.46	90.46	90.46	90.46	90.46	90.46	90.46
750ml 1.5l	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54	73.54
750ml chardonnay	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8
750ml smador	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8	105.8
750ml california	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56	73.56
750ml grand ree	130.8	130.8	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9
750ml Stevenot cab	147.6	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2	163.2
750ml sauv 750ml	73.68	73.68	73.68	73.68	73.68	73.68	73.68	73.68	73.68	73.68	73.68
750ml california											
750ml reserve											
750ml chardonnay											
750ml chardonnay											
375ml											

chevignon 750ml	105.9	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
chevignon 375ml	52.56	52.56	52.56	52.56	52.56	52.56	52.56	52.56	52.56	52.56	52.56
sauc napa 750 ml 1985	171	171	171	171	171	171	171	171	171	171	171
leap cab 750ml 1987	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6
Victor 750ml	189	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6
marlot 750ml	110.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
california 750ml	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9
cab sauv 750ml	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
Cab Sauv 750ml	291	291	291	291	291	291	291	291	291	291	291
choice 750ml	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24
chablis 4l	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24
Vintners 4l	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24
choice 4l	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24
burgundy 4l	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24
choice blush 4l	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24	30.24
chablis 4l	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Irish Rose 750ml	30	30	30	30	30	30	30	30	30	30	30
RWIR White 375	25	25	25	25	25	25	25	25	25	25	25
RWIR Rose 1.5l	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
liter 750ml	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
RWIR Rose 500ml	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
RWIR Rose 375ml	30	30	30	30	30	30	30	30	30	30	30
RWIR Rose 187ml	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
chardonnay 750ml	50	50	50	50	50	50	50	50	50	50	50
peaks cab sauv 750ml	50	50	50	50	50	50	50	50	50	50	50
peaks White 750ml	40	40	40	40	40	40	40	40	40	40	40
Zinfandel 1.5l	40	40	40	40	40	40	40	40	40	40	40
chardonnay 750ml	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3
Sauvignon blanc 750ml	78.12	78.12	78.12	78.12	78.12	78.12	78.12	78.12	78.12	64.3	87.6
CVherin 750ml	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
Chardonnay res 750ml	166	166	166	166	166	166	166	166	166	166	166
cab sauv res 750ml	155.2	155.2	155.2	155.2	155.2	155.2	155.2	155.2	155.2	155.2	155.2
Zinfandel 750ml	90.48	90.48	90.48	90.48	90.48	115.2	115.2	115.2	115.2	115.2	115.2
Zinfandel res 750ml	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3
pinot noir 750ml	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4
chardonnay 750ml	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5
pinot noir 750ml	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
chardonnay 750ml	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
Pinot Gris 750ml	118.2	118.2	118.2	118.2	127.4	127.4	127.4	127.4	127.4	127.4	127.4
Valley Pinot Noir 750ml	111	111	111	111	127.4	127.4	127.4	127.4	127.4	127.4	127.4
Berry Pinot 750ml	111	111	111	111	127.4	127.4	127.4	127.4	127.4	127.4	127.4
Noir 750ml	111	111	111	111	127.4	127.4	127.4	127.4	127.4	127.4	127.4
Chardonnay 750ml	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3
Shes Valley 750ml	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3
Res Cab Sauv 750ml	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	171.6	171.6
Cabernet 750ml	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4
vineyard 750ml	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3	105.3
2D Cab Sauv 750ml	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2	235.2
Chardonnay 750ml	212.4	212.4	212.4	212.4	212.4	212.4	212.4	212.4	212.4	226.2	226.2
2D Pinot Noir 750ml	216.8	216.8	216.8	216.8	235.8	235.8	235.8	235.8	235.8	235.8	235.8

Firm G	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Arcerio Chardonnay 750ML	88	88	88	88	88	88	88	88	88	88	88
Arcerio Sauv Blanc 750ML	66	66	66	66	66	66	66	66	66	66	66
Arcerio White Zin 1.5L	49	49	49	49	49	49	49	49	49	49	49
Arcerio White Zin 750ML	54	54	54	54	54	49	49	49	49	49	49
Arcerio Cab Sauv 750ML	88	88	88	88	88	88	88	88	88	88	88
Arcerio Nebbiolo 750ML	115	115	115	115	115	115	115	115	115	115	115
Arcerio Zinfandel 750ML	89	89	89	89	89	89	89	89	89	89	89
Arcerio Merlot 750ML	115	115	115	115	115	115	115	115	115	115	115
Arcerio Classic White NV 750ML	42	42	42	42	42	42	42	42	42	42	42
Arcerio Classic Red NV 750ML	42	42	42	42	42	42	42	42	42	42	42
Arrowood Chardonnay 750ML	224	224	224	224	224	224	224	224	224	224	224
Arrowood Cab Sauv 750ML	285	285	285	285	285	285	285	285	299	299	299
Arrowood Res Chardonnay 1.5L	276	276	276	276	310	310	310	310	310	310	310
Arrowood Res Cab Sauv 1.5L	390	390	390	390	390	390	390	390	390	390	390
Arrowood Vignier 6PK	131	131	131	131	131	131	131	131	131	131	131
Arrowood Late Harvest Reserve 375ML	295	295	295	295	295	295	295	295	295	295	295
Arrowood Pinot Blanc 6 pk	155	155	155	155	155	155	155	155	155	155	155
arrowood cuvee Michel Bertrand Chardonnay 6 pk	99	99	125	125	125	155	155	155	155	155	125
Belvedere Grove St Chardonnay 1.5L	78	78	78	78	78	78	78	78	78	78	78
Belvedere Grove Street Chardonnay 750ML	85	85	85	85	85	85	85	85	85	85	85
Belvedere Grove Street Cab Sauv 1.5L	78	78	78	78	78	78	78	78	78	78	78
Belvedere Cab Sauv 750ML	85	85	85	85	85	85	85	85	85	85	85
Belvedere Grove Street White Zinfandel 1.5L	55	59	58	58	58	58	58	58	58	58	58
Belvedere Grove Street White Zin 750ML	62	62	67	67	67	67	67	67	67	67	67
Belvedere Grove Street Red 1.5L	50	50	50	50	50	50	50	50	50	50	50
Belvedere Grove Street White 750ML	50	50	50	50	50	50	50	50	50	50	50

Belvedere Alexander Valley Chardonnay 750ML	115	115	115	115	115	115	115	115	115	115	115
Belvedere Russian River Chardonnay 750ML	139	139	139	139	139	139	139	139	139	150	150
Belvedere Dry Creek Zinfandel 750ML	108	108	117	117	117	117	117	117	117	135	135
Belvedere Sonoma Merlot 750ML	144	144	144	144	144	144	144	144	144	144	144
Belvedere Sonoma Cabernet 750ML	126	126	126	126	126	126	126	126	126	126	126
Belvedere Sonoma Chardonnay 750ML	88	88	126	126	88	88	88	88	88	98	98
Cambria Chardonnay Katherine's Vineyard 750ML	166	156	156	156	156	156	156	156	156	164	164
Cambria Pinot Noir Julia's vineyard 750ML	182	195	195	195	195	195	195	195	195	186	185.9
Cambria pinot noir res 750ml	150	133	168	168	168	168	168	168	168	168	168
cambria chardonnay res 750ml	105	126	126	126	126	126	126	126	126	120	119.5
ovambria sangiovese 750ml	210	210	210	210	210	210	210	210	210	210	210
cambria syrah 750ml	210	210	210	210	210	210	210	210	210	210	210
Chateau potelle chardonnay 750ml	100	100	100	100	100	116	116	116	116	116	116
Chateau potelle cabernety sauvignon 750ml	165	165	165	165	165	165	165	165	165	165	159
CP sauv blanc 750ml	87	87	87	87	87	87	87	87	87	87	87
CP VGS chardonnay 750ml	144	144	143.95	144	144	143.95	143.95	144	144	144	144
CP VGS zinfandel 750ml	240	240	240	240	240	240	240	240	240	240	240
Clos robert cab sauv 750ml	75	75	75	75	75	75	75	75	75	75	75
Clos Robert chardonnay 750ml	75	75	75	75	75	75	75	75	75	90	90
Clos robert merlot 750ml	81	81	81	81	81	81	81	81	81	81	81
De forner spectrum sauv blanc 750ml	100	100	100	100	100	118	118	118	118	118	100
De forner prism chardonnay 750ml	150	150	150	150	150	150	150	150	150	150	150

de korimer mosaic red meritage 750ml	175	175	175	175	175	196	196	196	196	196	175
de korimer lace late harvest 750ml	140	140	140	140	140	140	140	140	140	140	140
far niente chardonnay 750ml	300	300	320	320	320	320	320	320	320	339	339
far niente chardonnay 375ml	168	168	168	168	168	168	168	168	168	177	177
far niente cab sauv 750ml	420	465	465	465	465	465	465	465	465	465	465
far niente cab sauv 375ml	192	215	215	215	215	215	215	215	215	215	215
far niente dolce 375ml	208	208	208	208	208	208	208	208	208	208	208
garland ranch cab sauv 1.5l	44	53	53	53	53	56	56	56	56	56	56
garland ranch cab sauv 750ml	60	60	60	60	60	63	63	63	63	63	63
garland ranch chardonnay 1.5l	53	53	53	53	53	56	56	56	56	56	56
garland ranch chardonnay 750ml	60	60	60	60	60	63	63	63	63	63	63
garland ranch merlot 1.5l	53	53	53	53	53	56	56	56	56	56	56
garland ranch merlot 750ml	65	65	65	65	65	65	65	65	65	65	74
garland ranch sauv blanc 1.5l	43	49	49	49	49	49	49	49	49	49	49
garland ranch sauv blanc 750ml	48	53	53	53	53	53	53	53	53	53	53
garland ranch white zin 1.5l	43	49	49	49	49	49	49	49	49	49	49
garland ranch white zin 750ml	48	53	53	53	53	53	53	53	53	53	53
goosecross chardonnay 750ml	153	153	162	162	162	162	162	162	162	162	162
hanzell cab sauv 750ml	198	198	198	198	198	198	198	198	198	198	198
hanzell chardonnay 750ml	240	240	240	240	240	240	240	240	240	249	249
hanzell pinot noir 750ml	210	210	210	210	210	210	210	210	210	219	219
heltz cellar cab sauv 1991 750ml	710	710	710	710	710	710	710	710	710	710	710
heltz cellar ryan's red 750ml	95	95	95	95	95	95	95	95	95	95	95
heltz cellar grignolino 750ml	81	81	81	81	81	81	81	81	81	81	75
heltz cellar grignolino rose 750ml	70	70	70	70	70	70	70	70	70	70	78
heltz cellar zinfandel 750ml	114	114	114	114	114	114	114	114	114	114	125
heltz cellar napa chardonnay 750ml	93	93	93	93	93	93	93	93	93	93	167
heltz cellar napa cabernet 91 750ml	210	210	210	210	210	210	210	210	210	210	174

iron horse caberneta 1992 750ml	153	153	170	170	170	170	170	170	170	170	172
iron horse chardonnay 750ml	180	180	194	194	194	194	194	194	194	194	194
iron horse pinot noir 750ml	189	189	189	189	189	189	189	189	189	189	189
jarvis cab sauv 92 750ml	210	210	209.95	210	210	209.95	209.95	210	210	210	210
jarvis cab sauv 92 375ml	210	210	210	210	210	210	210	210	210	210	210
jarvis chardonnay 92 750ml	147	147	147	147	147	147	147	147	147	147	147
jarvis chardonnay 92 375ml	167.9	167.9	167.88	167.9	167.9	167.88	167.88	167.9	168	168	167.9
jarvis cab fran 750ml	168	168	168	168	168	168	168	168	168	168	168
JWile chardonnay 750ml	75	75	75	75	75	75	75	75	75	75	75
J wile cab sauv 750ml	75	75	75	75	75	75	75	75	75	75	75
J wile merlot 750ml	75	75	75	75	75	75	75	75	75	75	75
Kendall Jackson Cab Fano VR 750ml	130	130	130	130	130	130	130	130	130	130	130
K-J Cab Sauv VR 750ml	140	140	140	140	140	140	140	140	140	145	145.1
K-J Cab Sauv 745ml	74	74	74	74	74	74	74	74	74	85	85
KJ Cab Sauv grand res 750ml	316	288	288	288	335	335	335	335	335	324	323.5
KJ Chardonnay VR 750ml	131	131	131	131	131	131	140	131	131	120	119.9
KJ Chardonnay VR 375ml	69	69	69	69	69	69	69	69	69	74	74
KJ Chardonnay carmelot 750ml	140	150	150	150	150	150	150	150	150	145	145.1
KJ Chardonnay grand res 750ml	222	222	222	222	222	222	222	222	222	204	203.9
KJ cardinale (Red MErtage) 750ml	270	252	252	252	252	252	252	252	252	240	239.8
KJ Royale (White MErtage) 750ml	156	134	134	134	134	185	185	252	252	204	203.9
KJ Jo reeling VR 750ml	90	94	95.75	95.75	95.75	95.75	95.75	95.75	95.8	91.1	91.08
KJ Stuv Blanc VR 750ml	90	94	95.75	95.75	95.75	95.75	95.75	95.75	95.8	91.1	91.08
KJ Grand Res Merlot 750ml	278	278	335	335	335	335	335	335	335	324	323.9
KJ Merlot VR 750ml	140	140	140	140	140	140	155	155	150	145	145.1
KJ Pinot noir VR 750ml	131	131	131	131	140	140	140	140	140	145	145.1
310	288	288	288	288	288	288	288	288	288	240	239.9
KJ zinfandel VR 750ml	131	131	131	131	131	141	145	145	131	145	145.1
KJ Zinfandel Grand REerve 750ml	210	210	210	210	210	210	210	210	210	210	210
KJ Syrah grand reserve 750ml	194	194	194	194	194	194	194	194	194	194	194
Kende cab sauv 750ml	142	142	142	142	142	142	142	142	142	142	142

Kunde res cab 750ml	185	185	185	185	185	185	185	185	185	185	185
Kunde Sauv BLanc 750ml	115	115	115	115	115	115	115	115	115	115	115
Kunde Chardonnay 750ml	135	135	135	135	135	135	135	135	135	135	135
Kunde res Chardonnay 750ml	185	185	185	185	185	185	185	185	185	185	204
Kunde zinfandel 750ml	142	142	142	142	142	142	142	142	142	142	142
Kunde merlot 750ml	159	159	159	159	159	159	159	159	159	159	159
La creme sonoma chardonnay 750ml	135	135	135	135	135	135	135	135	135	135	135
lakewood montag estate 750ml	52	52	52	52	52	52	52	52	52	52	52
lakewood sauv blanc 750ml	80	80	80	80	80	105	105	105	105	95.9	95.5
livingston wines cab sauv moffett vineyards 750ml	246	246	246	246	246	246	246	246	246	246	246
livingston wines cab sauv stanley's selection 750 ml	162	162	162	162	162	162	162	162	162	162	164
lockwood cab sauv 750ml	130	130	130	130	130	130	130	130	130	130	130
lockwood chardonnay 750ml	104	110	110	110	110	110	110	110	110	116	116
lockwood merlot 750ml	144	144	144	144	144	144	144	156	156	156	156
lockwood sauv blanc 750ml	93	93	93	93	93	93	93	93	93	93	93
lockwood res cab 750ml	201	201	201	201	201	201	201	201	201	201	201
lockwood res chardonnay 750ml	176	176	176	176	176	176	176	176	176	176	176
lockwood refresco 750ml	66	66	66	66	66	66	66	66	66	66	66
meddellene wines central coast chardonnay 750ml	78	78	78	78	78	78	78	78	78	78	78
Meddelene central coast shardonay 1.5l	74	74	74	74	74	74	74	74	74	74	74
Meddelene San simon chardonnay 750ml	115	115	115	115	115	115	115	115	115	115	115
Meddelene san simon merlot 750ml	115	115	115	115	115	115	115	115	115	115	115
Meddelene white zinfandel 750ml	56	56	56	56	56	56	56	56	56	56	56
MArietta wines cab sauv 750ml	126	126	126	126	126	126	126	126	126	144	144
MArietta lid vine red 750ml	81	81	81	81	88	88	88	88	88	88	88
Marietta zinfandel 750ml	126	126	126	126	126	126	126	126	126	144	144

Merlette petite sirah 750ml	119	119	119	119	119	119	119	119	119	144	144
Pepperwood cab sauv 750ml	56	65	65	65	65	65	65	65	65	65	65
pepperwood chardonnay 750ml	56	65	65	65	65	65	65	65	65	65	65
pepperwood pinot noir 750ml	56	65	65	65	65	65	65	65	65	65	65
pepperwood cab france 750ml	56	65	65	65	65	65	65	65	65	65	65
raymond cab sauv res 750ml	258	258	258	258	258	258	258	258	258	258	258
raymond cab sauv 750ml	157	157	157	157	157	157	157	157	157	157	157
raymond cab sauv 375ml	76	76	76	76	76	76	76	76	76	76	76
raymond napa chardonnay 750ml	146	146	146	146	146	146	146	146	146	146	146
raymond napa chardonnay 375ml	67	67	67	67	67	67	67	67	67	67	67
raymond sauv blanc 750ml	94	94	94	94	94	94	94	94	94	94	94
raymond chardonnay res 750ml	177	177	177	177	177	177	177	177	177	177	177
raymond amberhill chardonnay 750ml	108	108	108	108	108	108	108	108	108	108	108
raymond amberhill cab sauv 750ml	108	108	108	108	108	108	108	108	108	120	120
raymond meritage red 750ml	177	177	177	177	177	177	177	177	177	177	177
raymond merlot 750ml	157	157	157	157	157	157	157	157	157	157	157
raymond pinot noir 750ml	157	157	146	146	146	146	146	146	146	146	146
Round hill white 1.5l	44	44	49	49	49	49	49	49	49	52	52
Round hill red 1.5l	44	44	49	49	49	49	49	49	49	54	54
round hill white zin 1.5l	52	52	52	52	52	52	52	52	52	52	52
round hill white zin 750ml	66	66	54	54	54	54	54	54	54	54	54
round hill chardonnay 1.5l	72	72	69	69	69	69	69	69	69	72	72
round hill chardonnay 750ml	66	66	78	78	78	78	78	78	78	78	78
round hill cab sauv 1.5l	72	72	69	69	69	69	69	69	69	72	72
round hill cab sauv 750ml	78	78	78	78	78	78	78	78	78	78	78
round hill merlot 750ml	78	78	78	78	78	78	78	78	78	78	78
round hill napa cab sauv 750ml	125	125	125	125	125	125	130	130	130	130	130
round hill napa chardonnay 750ml	109	109	109	109	109	109	114	114	114	114	114
round hill napa merlot 750ml	125	125	125	125	125	125	130	130	130	130	130
San antonio cooking wines meritage 750ml	53	53	53	53	53	53	53	53	53	53	53

San antonio cooking wines crmersale 4l	53	53	53	53	53	53	53	53	53	53	53
San antonio cooking wines cream sherry 4l	53	53	53	53	53	53	53	53	53	53	53
San antonio cooking wines medium sherry	53	53	53	53	53	53	53	53	53	53	53
San antonio cooking wines velvet prot 4l	53	53	53	53	53	53	53	53	53	53	53
San antonio cooking wines dry vermouth	53	53	53	53	53	53	53	53	53	53	53
san antonio cooking wines sweet vermouth 750ml	53	53	53	53	53	53	53	53	53	53	53
SmithMadrone chardonnay 750ml	126	126	126	126	126	126	126	126	126	126	126
smith Madrone Riesling 750ml	80	80	80	80	80	80	80	80	80	80	80
Stonestree chardonnay 750ml	210	210	210	210	210	210	210	210	210	204	203.9
Stonestreet pinot noir 750ml	252	252	252	252	252	252	252	252	252	240	239.9
SSonestreet legacy (red meritage) 750ml	160	160	160	160	160	180	160	160	160	198	198
Stonestreet cab sauv 750ml	210	252	252	252	252	252	252	252	252	286	285.9
Stonestreet merlot 750ml	180	252	252	252	252	252	252	252	252	27	27
storybook mountain zinfandel 750ml	141	141	141	141	141	141	141	141	141	141	141
storybook mountain zinfandel eastern exposure 750ml	180	180	180	180	180	180	180	180	180	180	180
storybook mountain zinfandel res 750ml	231	231	231	231	231	231	231	231	231	231	231
trelethen library chardonnay 750ml	165	165	165	165	165	165	165	165	165	165	165
trelethen cab sauv 750ml	202	202	202	202	202	220	220	220	220	220	220
trelethen res cabernet 750ml	187	187	187	187	187	187	187	187	187	187	187
trelethen chardonnay 750ml	187	198	198	198	198	198	198	198	198	198	198
trelethen dry resling 750ml	96	96	96	96	96	108	108	108	96	108	108
trelethen eschoi-cabern et 750ml	94	106	106	106	106	106	106	106	106	106	106
trelethen eschoi-chardon nay 750ml	94	106	106	106	106	106	106	106	106	106	106
vianna nebbiolo 750ml	142	142	142	142	142	142	142	142	142	209	209

viansa odenio de cento 750ml	284	284	284	284	284	284	284	284	284	284	284
willam beccala chardonnay 750ml	107	122	122	122	122	122	122	122	122	122	122
willam beccala merlot 750ml	130	139	139	139	139	139	139	139	139	139	139
vendage cab sauv 1.5l	46	46	49	49	49	49	49	49	49	49	49
vendage cab sauv 750ml	56	56	56	56	56	56	56	56	56	59	59
vendage cab sauv 187ml	25	25	25	25	25	25	25	25	25	30	30
vbendage chardonnay 1.5l	46	49	49	49	49	49	49	49	49	49	49
vendage chardonnay 750ml	56	56	56	56	56	56	56	56	56	56	56
vendage chardonnay 187ml	25	25	25	25	25	25	25	25	25	30	30
vendage gamay beaujolais 1.5l	46	46	46	46	46	46	46	46	46	46	46
vendage gamay beaujolais 750ml	56	56	56	56	56	56	56	56	56	56	56
vendage pinot noir 1.5l	46	46	49	49	49	49	49	49	49	49	49
vendage pinot noir 750ml	56	56	56	56	56	56	56	56	56	59	59
vendage red 1.5l	46	46	46	46	46	46	46	46	46	46	46
vendage sauv blanc 1.5l	46	46	46	46	46	46	46	46	46	46	46
vendage sauv blanc 750ml	56	56	56	56	56	56	56	56	56	56	56
vendage white zinfandel 1.5l	46	46	46	46	46	46	46	46	46	46	46
vendage white zinfandel 750ml	56	56	56	56	56	56	56	56	56	56	56
vendage white zinfandel 187ml	25	25	25	25	25	25	25	25	25	30	30
vendage zinfandel 1.5l	46	46	46	46	46	46	46	46	46	46	46
vendage zinfandel 750ml	56	56	56	56	56	56	56	56	56	56	56
vendage merlot 750ml	56	56	56	56	56	56	56	56	56	59	59
vita nova sauv blanc 750ml	80	80	80	80	80	80	80	80	80	80	80
vita nova cab franc 750ml	114	114	114	114	114	114	114	114	114	114	114
vita nova chardonnay 750ml	144	144	144	144	144	144	144	144	144	144	144
vita nova reservatum red 750ml	144	144	144	144	144	144	144	144	144	144	144
vt anova reservatum white	144	144	144	144	144	144	144	144	144	144	144
zaca mesa chardonnay 750ml	122	122	122	122	122	122	122	122	122	138	138
zaca mesa z-ovree 750ml	130	130	130	130	130	130	130	130	130	139	139
zaca mesa chardonnay-ch apel vineyard	183	183	183	183	183	183	183	183	183	183	183
zaca mesa pinot noir sierra madre vineyard 750ml	198	198	198	198	198	198	198	198	198	198	198

zellerbach cab sauv 750ml	93	104	104	104	104	104	104	104	104	104	104
zellerbach chardonnay 750ml	93	98	98	98	98	98	98	98	98	98	98
zellerbach sauv blanc 750ml	72	83	83	83	83	83	83	83	83	83	83
zellerbach estate chardonnay 750ml	114	114	114	114	114	114	99	99	99	99	99
classic wines forest glen cab sauv 750ml	98	98	98	98	98	98	98	98	98	98	98
classic wines forest glen chardonnay 750ml	98	98	98	98	98	98	98	98	98	98	98
classic wines forest glen merlot 750ml	98	98	98	98	98	98	98	98	98	98	98
fox hollow cab sauv 750ml	102	102	102	102	102	102	102	102	102	102	102
fox hollow chardonnay 750ml	102	102	102	102	102	102	102	102	102	102	102
fox hollow merlot 750ml	102	102	102	102	102	102	102	102	102	102	102
grand cru cab sauv 750ml	70	70	70	70	70	70	70	70	70	70	70
grand cru chardonnay 750ml	70	70	70	70	70	70	70	70	70	70	70
grand cru merlot 750ml	70	70	70	70	70	70	70	70	70	70	70
almaden blush chablis 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden blush chablis 3l	30.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden blanc 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden chenin blanc 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden french colombard 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden french colombard 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden golden chablis 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden golden chablis 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden burgundy 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden burgundy 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden burgundy 4l	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	37	37	36.99
almaden chablis 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden chablis 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden chablis 4l	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	37	37	36.99
almaden rhine 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden rhine 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden white grape 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden white grape 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden white zinfandel 1.5l	34.99	34.99	34.99	34.99	34.99	34.99	34.99	34.99	35	35	34.99
almaden white zinfandel 3l	37.99	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5

almaden rose 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden rose 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden rose 4l	36.99	36.99	36.99	36.99	36.99	36.99	36.99	36.99	37	37	36.99
almaden cab sauv 1.5l	34.99	34.99	34.99	34.99	34.99	34.99	34.99	34.99	35	35	34.99
almaden chardonnay 1.5l	34.99	34.99	34.99	34.99	34.99	34.99	34.99	34.99	35	35	34.99
almaden sauv blanc 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden zinfandel 1.5l	34.99	34.99	34.99	34.99	34.99	34.99	34.99	34.99	35	35	34.99
almaden light blush chablis 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden light blush chablis 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden light chablis 1.5l	30.99	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
almaden light chablis 3l	33.99	33.99	33.99	33.99	33.99	33.99	33.99	33.99	34	34	33.99
almaden light white zinfandel 1.5l	34.99	34.99	34.99	34.99	34.99	34.99	34.99	34.99	35	35	34.99
almaden light white zinfandel 3l	37.99	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5
almaden cask blush chablis 5l	35	39	39	39	39	39	39	39	39	39	39
almaden cask golden chablis 5l	35	39	39	39	39	39	39	39	39	39	39
almaden cask burgundy 5l	35	39	39	39	39	39	39	39	39	39	39
almaden cask burgundy 18l	32.99	34.49	34.49	34.49	34.49	34.49	34.49	34.49	34.5	34.5	34.49
almaden cas chablis 5l	35	39	39	39	39	39	39	39	39	39	39
almaden cask chablis 18l	32.99	32.99	32.99	32.99	32.99	32.99	32.99	32.99	33	33	32.99
almaden cask rhine 5l	35	39	39	39	39	39	39	39	39	39	39
almaden cask rose 5l	32.99	39	39	39	39	39	39	39	39	39	39
almaden cask white grance 5l	35	39	39	39	39	39	39	39	39	39	39
almaden cask white zinfandel 5l	49	49	49	49	49	49	49	49	49	49	49
almaden cask white grenache 5l	35	49	49	49	49	49	49	49	49	49	49
almaden cask cab sauv 5l	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
almaden cask chardonnay blanc 5l	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
almaden cask chardonnay blanc 18l	32.99	32.99	32.99	32.99	32.99	32.99	32.99	32.99	33	33	32.99
franzie white zinfandel box 3l	62.5	62.5	62.5	62.5	62.5	58.75	62.5	62.5	62.5	62.5	62.5
franzie sauvignon blanc box 5l	62.5	62.5	62.5	62.5	62.5	87	87	93	62.5	62.5	104
franzie chardonnay box 3l	81	81	81	81	81	87	87	62.5	81	81	93
franzie sauv blanc box 3l	81	81	81	81	81	81	81	47.5	81	81	62.5
franzie white grenach box 3l	45.5	45.5	45.5	45.5	47.5	47.5	47.5	47.5	45.5	45.5	39
franzie blush box 3l	45.5	45.5	45.5	45.5	47.5	47.5	47.5	47.5	45.5	45.5	39

franzia chablis box 3l	45.5	45.5	45.5	45.5	47.5	47.5	47.5	47.5	45.5	45.5	39
franzia rhineflour box 3l	45.5	45.5	45.5	45.5	47.5	47.5	47.5	47.5	45.5	45.5	39
franzia burgundy 3l box	45.5	45.5	45.5	45.5	47.5	47.5	47.5	47.5	45.5	45.5	39
franzia box wine chardonnay 5l	90.5	90.5	63.5	63.5	63.5	95.5	95.5	104	93	93	93
franzia box wine cab sauv 5l	90.5	90.5	63.5	63.5	63.5	95.5	95.5	104	93	93	93
franzia box wine sauv blanc 5l	53.75	53.75	53.75	53.75	53.75	58.75	58.75	62.5	62.5	53.8	62.5
franzia box wine white zinfandel 5l	53.75	53.75	49	49	49	49	49	49	49	49	49
franzia box wine white grenache 5l	41.25	41.25	39	39	39	39	39	39	39	39	39
franzia box wine chenin blanc 5l	41.25	41.25	39	39	39	39	39	39	39	39	39
franzia box wine french colombard 5l	41.25	41.25	41.25	41.25	41.25	41.25	39	39	39	39	39
franzia box wine vin rose 5l	41.25	41.25	41.25	41.25	41.25	41.25	39	39	39	39	39
franzia box wine chablis 5l	41.25	41.25	41.25	41.25	41.25	41.25	39	39	39	39	39
franzia box wine rhineflour 5l	41.25	41.25	41.25	41.25	41.25	41.25	39	39	39	39	39
franzia box wine golden 5l	41.25	41.25	41.25	41.25	41.25	41.25	39	39	39	39	39
franzia box wine blush 5l	41.25	41.25	41.25	41.25	41.25	41.25	39	39	39	39	39
franzia box wine burgundy 18l	37.5	37.5	34.49	34.49	34.49	34.49	34.49	34.49	34.5	34.5	34.49
franzia box wine cab sauv 18l	37.5	37.5	34.49	34.49	34.49	34.49	34.49	34.49	34.5	34.5	34.49
franzia box wine chablis 18l	37.5	37.5	34.49	34.49	34.49	34.49	34.49	34.49	34.5	34.5	34.49
mogen david traditionale cherry 1.5l	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.3	31.3	31.25
mogen david traditional cherry 750ml	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
MDT blackberry 3l	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
MDT blackberry 1.5l	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.3	31.3	31.25
MDT Blackberry 750ml	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
MDT Concord 3l	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5	35.5
MDT Concord 1.5l	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.25	31.3	31.3	31.25
MDT concord 750 ml	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
MDT red table wine 750ml	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
MD 20/20 hawaiian blue 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 Hawaiian Blue 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25

MD 20/20 Pink grapefruit 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 Pink Grapefruit 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25
MD 20/20 Grape 1.5l	26	26	26	26	26	26	26	26	26	26	26
MD 20/20 Grape 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 Grape 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25
MD 20/20 orange 1.5l	26	26	26	26	26	26	26	26	26	26	26
MD 20/20 orange 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 orange 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25
MD 20/20 strawberry 1.5l	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 lkw lemon 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 lkw lemon 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25
MD 20/20 Banana red 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 banana red 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25
MD 20/20 Jamaican cheer 750ml	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.3	27.3	27.25
MD 20/20 Jamaican cheer 375ml	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.3	29.3	29.25
argyle coolers white zin	22	22	22	22	22	22	22	22	22	22	22
argyle reeling 750ml	94	94	94	94	94	94	94	94	94	94	94
argyle brut 750ml	181	181	181	181	181	181	181	181	181	181	181
argyle chardonnay 750ml	161	161	161	161	161	161	161	161	161	161	161
argyle W/V chardonnay 750ml	114	114	114	114	114	114	114	114	114	114	114
argyle pinot noir 750ml	90	90	90	90	90	90	90	90	90	107	107
columbia winery cab sauv 750ml	124	133	133	133	133	133	133	133	133	142	142
columbia chardonnay 750ml	100	109	109	109	109	109	109	109	109	118	118
columbia merlot 750ml	124	133	133	133	133	133	133	133	133	142	142
columbia semillon 750ml	75	75	75	75	75	75	75	75	75	84	84
columbia syrah 750ml	192	192	192	192	192	192	192	192	192	219	219
columbia chevier 750ml	88	88	88	88	88	88	88	88	88	96	96
columbia sauv blanc 750ml	77	77	77	77	77	77	77	77	77	86	86
columbia semillon chardonnay 750ml	77	77	77	77	77	77	77	77	77	80	80
columbia gewurztraminer 750ml	64	64	64	64	64	64	64	64	64	79	79
columbia jo reeling 750ml	64	64	64	64	64	64	64	64	64	76	76

domaine drouhin pinot noir 750ml	144	144	144	144	144	144	144	144	144	144	149	148.5
elk cove vineyards willamette valley pinot noir 750ml	114	114	114	114	114	114	114	123	123	123	123	123
elk grove willamette valley chardonnay 750ml	114	114	114	114	114	114	114	114	114	114	114	114
elk cove willamette valley pinot gris 750ml	114	114	114	114	114	114	114	123	123	123	123	123
willamette valley jo reeling 750ml	73	73	73	73	73	73	73	85	85	85	85	85
elk grove estate ree pinot noir	200	200	200	200	200	200	200	200	200	200	200	200
paul thomas chardonnay 750ml	89	98	98	98	98	98	98	98	98	98	98	98
paul thomas cab sauv 750ml	98	98	98	98	98	98	98	98	98	98	98	98
paul thomas cab merlot 750ml	98	98	98	98	98	98	98	98	98	98	108	108
paul thomas merlot 750ml	89	98	98	98	98	98	98	98	98	98	108	108
paul thomas pear 750ml	77	77	77	77	77	77	77	77	77	77	86	86
paul thomas raspberry 750ml	77	77	77	77	77	77	77	77	77	77	86	86
paul thomas rhubarb 750ml	75	77	77	77	77	77	77	77	77	77	86	86
paul thomas reeling 750ml	60	60	60	60	60	60	60	60	60	60	69	69
preston vineyard cab sauv 750ml	104	104	126	126	126	126	126	126	126	126	126	126
preston chardonnay 750ml	104	104	126	126	126	126	126	126	126	126	126	126
preston fume blanc 750ml	76	69	69	69	69	95	95	95	95	95	95	95
preston j reeling 750ml	76	66	66	66	66	78	78	78	78	78	78	78
preston merlot 750ml	122	110	110	110	110	110	110	110	110	110	110	110
preston gamay rose 750ml	70.5	99	99	99	99	99	99	99	99	99	99	99
saddle mountain cab sauv 750ml	45	45	45	45	45	45	45	45	45	45	45	45
saddle mountain fume blanc 750ml	36	36	36	36	36	36	36	36	36	36	36	36
saddle mountain jo reeling 750 ml	36	36	36	36	36	36	36	36	36	36	36	36
saddle mountain cascade blush 1.5l	36	36	36	36	36	36	36	36	36	36	36	36
saddle mountain seillon chardonnay 750ml	45	45	45	45	45	45	45	45	45	45	45	45

sokol blosser chardonnay-ye mhill 750ml	119	119	127	127	127	127	127	127	127	127	127
sokol blosser pinot noir -yemhill 750ml	119	119	127	127	127	127	127	127	127	127	138
sokol blosser chardonnay redland 750ml	199	199	229	229	229	199	199	199	199	210	210
sokol blosser pinot noir redland 750ml	229	229	229	229	229	229	229	229	229	235	235
sokol blosser semillon chardonnay 750ml	86	86	86	86	86	86	86	86	86	86	86

Firm H	96:2	96:3	96:4	96:5	96:6	96:7	96:8	96:9	96:10	96:11	96:12
Angeline Zinfandel 750ML	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9
Atlas Peak Sangiovese 750ML	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5	114.5
Atlas Peak Consenso 750ML	211.8	211.8	211.8	211.8	211.8	211.8	211.8	211.8	211.8	211.8	211.8
Atlas Peak Sangiovese Classic 750ML	152	152	152	152	152	152	152	152	152	152	152
Atlas Peak Sangiovese Reserve 750ML	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1	229.1
Atlas Peak Cabernet Sauvignon 750ML	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6	170.6
Atlas Peak Chardonnay 750ML	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2
Beringer Cab Sauv Knight's Valley 750ML	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4	161.4
Beringer Cab Sauv Res 1990 1.5L	466	466	466	466	466	466	466	466	466	466	466
Beringer Cab Sauv 1988 750ML	413.4	413.4	413.4	413.4	552	552	552	552	552	552	552
Beringer Cab Sauv 1989 750ML	350.8	350.8	350.8	350.8	384	384	384	384	384	384	384
Beringer Cabernet Prot 750ML	122.9	122.9	122.9	122.9	122.9	122.9	122.9	122.9	122.9	161.4	161.4
Beringer Chardonnay Reserve 1.5L	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8
Beringer Chardonnay Reserve 750ML	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4
Beringer Chardonnay 750ML	140	140	140	140	140	140	140	140	140	151.4	151.4
Beringer Cab Sauv Blanc 750ML	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92
Beringer Meritage Blanc Knight's Valley 750ML	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92	88.92
Beringer Chenin Blanc 750ML	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
Beringer Gamay Beaujolais 750ML	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	90	90
Beringer Gamay Nouveau 750ML	72	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	90	90
Beringer Gewurztraminer 750ML	72	72	72	72	72	72	72	72	72	72	72
Beringer Zinfandel 750ML	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2

Beringer Johannesberg Reisling (Dry) 750ML	79.05	79.05	79.05	79.05	79.05	79.05	79.05	79.05	79.05	79.05	79.05
Beringer Johannesberg Reisling Late Harvest 750ML	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4	210	210
Beringer Nightingale 750ML	397	397	348	348	348	348	348	348	348	348	348
Beringer White Zinfandel 750ML	79.05	79.05	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
Beringer White Cabernet 750ML	72	72	72	72	72	72	72	72	72	72	72
Beringer Howell Mountain Merlot 1.5L	240	240	240	240	240	240	240	240	240	240	240
Beringer Howell Mountain Merlot 750ML	252	252	252	252	252	252	252	252	252	336	336
Blackstone Chardonnay 750ML	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	111.9	124.8	124.8
Blackstone Merlot Napa 750ML	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9	171	171
Blackstone Merlot California 750ML	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	106.5	119.9	119.9
boucane Chardonnay Carmos 750ML	128.2	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4
Couchene Pinot Noir Carmos 750ML	138.7	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4	155.4
Bouchaine Pinot Noir Reserve	196.8	196.8	196.8	196.8	196.8	196.8	196.8	196.8	196.8	196.8	196.8
Bouchaine Gewurztrami 750ML	87.36	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
Blackstone Cab Sauv 750ML	239	252	252	252	252	252	252	252	252	252	252
Calabread cab Sauv res 750ML	442	442	441	441	444	444	444	444	444	444	444
Calabread Chardonnay 750ML	225	225	225	225	225	225	225	243	243	243	243
Calabread Chardonnay reserve 750ML	306.1	306.1	306.1	306.1	330	330	330	330	330	330	330
Calabread Sauv blanc 750ML	141.8	141.8	141.8	141.8	145.2	145.2	145.2	145.2	145.2	145.2	145.2
Callaway Chardonnay 1.5L	91.98	91.98	91.98	91.98	91.98	91.98	91.98	91.98	91.98	91.98	91.98
Callaway Chardonnay 750ML	99.72	99.72	99.72	99.72	100.7	100.7	100.7	100.7	99.72	99.72	99.72
Callaway Cab Sauv 750ML	103.2	103.2	103.2	103.2	103.2	103.2	103.2	100.7	100.7	100.7	100.7
Callaway Chenin Blanc 750ML	99.72	99.72	73.56	73.56	143.9	143.9	143.9	143.9	143.9	143.9	143.9
Callaway Fume Blanc 750ML	82.8	82.8	82.8	82.8	71.1	71.1	71.1	71.1	71.1	71.1	71.1
Callaway Sauv Blanc 750ML	82.8	82.8	82.8	82.8	77.7	77.7	77.7	77.7	77.7	77.7	77.7

White Reisling 750ML	73.56	73.56	73.56	73.56	77.7	77.7	77.7	77.7	77.7	77.7	77.7
Callaway Sweet Nancy 375ML	207.5	207.5	207.5	207.5	71.1	71.1	71.1	71.1	71.1	71.1	71.1
Callaway Mouvedere 750ML	142.8	142.8	142.8	142.8	143.9	143.9	143.9	143.9	143.9	143.9	143.9
Callaway Vouner 750ML	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
Callaway Pinot Gris 750ML	115.2	115.2	115.2	115.2	101.9	101.9	101.9	101.9	101.9	101.9	101.9
Chappellet Cab Sauv 750ML	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6
Chappellet Cab Sauv 375ML	216	216	216	216	216	216	216	216	216	216	144.6
Chappellet Cab Sauv Sig 750ML	189	189	189	189	189	189	189	189	189	189	189
Chappellet Cab Sauv Res 1989 750ML	240	240	240	240	240	240	240	240	240	240	240
Chappellet Cab Sauv Res 1990 750ML	190	190	190	190	190	190	190	190	190	190	190
Chappellet sig Cab Sauv 750ML	312	312	240	240	240	240	240	240	240	240	240
Chappellet prichard hill cabSauv 750ML	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	151.8	151.8
Chappellet Chardonnay 750ML	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6
Chappellet Chenin Blanc 750ML	80.88	80.88	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
Chappellet Johannisberg Reisling 750 ML	73.32	73.32	73.32	73.32	73.32	73.32	73.32	73.32	73.32	73.32	73.32
Chappellet Old Vine Cuvee 750ML	103.6	103.6	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2
Chappellet Merlot 750ML	175.2	175.3	186	186	186	186	186	186	186	186	186
C. Souverain Res Cab Sauv 750ML	189	189	189	189	189	189	189	189	189	189	189
C. Souverain Cab Sauv 750ML	115.1	189	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1
C. Souverain Chardonnay 750ML	115.1	125.8	125.8	125.8	148.1	148.1	148.1	148.1	148.1	148.1	148.1
C. Souverain Chardonnay 375 ML	52.97	52.97	52.97	52.97	52.97	52.97	52.97	52.97	52.97	52.97	52.97
C. Souverain Sauv Blanc 750ML	81.24	82.9	82.9	82.9	82.9	82.9	82.9	95.9	95.9	95.9	95.9
C. Souverain Merlot 750ML	127.4	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1
C. Souverain Zinfandel Dry Creek 750ML	88.92	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1
S. Souverain Pinot Noir Winemaker's Reserve 750ML	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4
C. Souverain Zinfandel 750ML	75.12	75.12	75.12	75.12	75.12	75.12	75.12	75.12	75.12	75.12	75.12

Christophe Vineyards Pinot Noir 750ML	81	81	81	81	89.9	97.4	97.4	97.4	97.4	97.4	97.4
Christophe V. Chardonnay 750ML	81	81	81	81	89.9	97.4	97.4	97.4	97.4	97.4	97.4
Christophe V. Cab Sauv 750ML	81	81	81	81	89.9	97.4	97.4	97.4	97.4	97.4	97.4
Christophe V. Sauv Blanc 750ML	63	63	63	63	63	63	63	75.6	75.6	97.4	97.4
Christophe V. Cuvee White 750ML	44	44	44	44	44	44	44	75.6	75.6	75.6	75.6
Christophe V. Cab Sauv Res 750ML	91	91	91	91	91	91	91	89.9	89.9	89.9	89.9
Semillon 750ML	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6
Cloine Oakley Cab Sauv 750ML	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2	106.2
De Oakley 750ML	69	69	69	69	69	69	69	69	76.2	76.2	76.2
Mouvedre 750ML	133.8	133.8	133.8	133.8	106.2	106.2	106.2	109.2	109.2	109.2	109.2
Zinfandel 750ML	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8
Carignane 750ML	83.4	83.4	83.4	83.4	84.6	84.6	84.6	84.6	84.6	84.6	84.6
Cline Late Harvest Zin 750	171	171	171	171	171	171	171	171	171	171	171
Cline Late Harvest Zin 825	96	96	96	96	96	96	96	96	96	96	96
Marsanne 750ML	171	171	171	171	171	171	171	171	171	171	171
Clos du Bois chardonnay 1.5l	95.92	95.92	95.92	95.92	106.4	106.4	106.4	106.4	106.4	106.4	106.4
CDB chardonnay 750ml	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3
CDB chardonnay 375ml	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72
CDB Merlot 750ml	152.2	152.2	152.2	152.2	143.9	149.9	149.9	149.9	149.9	149.9	149.9
CDB merlot 375ml	82.2	82.2	82.2	82.2	82.2	77.9	77.9	77.9	77.9	77.9	77.9
CDB gewurztramin er early harvest 750ml	71.62	71.62	71.62	71.62	71.62	71.62	71.62	71.62	71.62	71.62	71.62
CDB pinot noir 750ml	121.3	121.3	121.3	121.3	130.3	130.3	130.3	132.8	132.8	132.8	132.8
CDB cab sauv 750ml	121.3	121.3	121.3	121.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
CDB cab sauv 375ml	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72	63.72
briarcrest 750ml	189	189	189	189	167.9	167.9	167.9	167.9	167.9	167.9	167.9
CDB flintwood 750ml	161.3	161.3	161.3	161.3	131.9	131.9	131.9	131.9	131.9	131.9	131.9
CDB sauv blanc 750ml	71.62	71.62	71.62	71.62	82.9	82.9	82.9	82.9	82.9	82.9	82.9
CDB calcaire 750ml	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
CDB marlstone cab sauv 750ml	217.2	217.2	217.2	217.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2
CDB zinfandel 750ml	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3

CDS winemaker's chardonnay 750ml	226	226	226	226	226	226	226	226	226	226	226
Clos pegase merlot 750ml	171	171	171	171	171	173.9	195	195	195	195	195
Clos pegase chardonnay 750ml	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
Clos pegase cab sauv 750ml	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6
Clos pegase homnaye 750ml	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4
della valle cab sauv 750ml	252	252	252	252	252	252	252	318	318	318	318
della valle maria 750ml	330	330	330	330	330	330	330	318	318	318	318
della valle pietre rosse 750ml	150	150	150	150	150	150	150	150	150	150	150
deer valley chardonnay 1.5l	46.98	46.98	46.98	46.98	47.9	47.9	47.9	47.9	47.9	47.9	47.9
deer valley chardonnay 750ml	53.16	53.16	53.16	53.16	59.4	59.4	59.4	59.4	59.4	59.4	59.4
deer valley chardonnay 750ml (15pk)	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16
Deer valley cab sauv 1.5l	37.8	37.8	37.8	37.8	43.5	43.5	43.5	43.5	43.5	43.5	43.5
deer valley white	40.8	40.8	40.8	40.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8
zinfandel 250ml	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
zinfandel 750ml (15pk)	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
zinfandel 187ml	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
deer valley cab sauv 1.5l	46.98	46.98	46.98	46.98	47.9	47.9	47.9	47.9	47.9	47.9	47.9
cab sauv 750ml	53.16	53.16	53.16	53.16	59.4	59.4	59.4	59.4	59.4	59.4	59.4
Deer Valley cab sauv 750ml (15pk)	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16	53.16
deer valley merlot 1.5l	54.56	54.56	54.56	54.56	47.9	47.9	47.9	47.9	47.9	47.9	47.9
deer valley Merlot 750ml	53.16	53.16	53.16	53.16	59.4	59.4	59.4	59.4	59.4	59.4	59.4
Donatello Carnaro pinot oir 750ml	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9	167.9
Gloria Ferrer pinot noir 750ml	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2
Gloria Ferrer Chardonnay Pinot cab insigne 750ml	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2	152.2
insigne 750ml	192	192	192	192	192	192	192	192	192	204	204
Fisher Wedding cab 750ml	120	120	120	120	120	120	120	120	120	141	141
faher chardonnay coach insigne 750ml	156	156	156	156	156	156	156	156	156	156	156
faher whitney's chardonnay 750ml	114	114	114	114	114	114	114	114	114	114	114
faher RCF merlot 750ml	114	114	114	114	114	114	114	114	114	114	114

GRGich Hills Cab Sauv 750ml	275.6	300	300	300	300	300	300	300	300	300	300	300
GRGich Cab Sauv 375ml	151.8	151.8	201.6	201.6	201.6	201.6	201.6	201.6	201.6	201.6	189	189
GRGich Chardonnay 750ml	275.3	275.3	300	300	300	300	300	324.6	324.6	324.6	324.6	324.6
GRGich Chardonnay 375ml	151.8	151.8	176.4	176.4	176.4	176.4	176.4	177	177	189	189	189
Grigich fume blanc 750ml	152	152	164.4	164.4	164.4	164.4	164.4	164.4	164.4	164.4	164.4	164.4
Grigich fume blanc 375ml	78.24	78.24	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
Grigich Zinfandel 750ml	164.4	189	189	189	189	189	189	189	189	189	189	189
Grigich Jo Reeling L.H. 750ml	743.4	743	743	743	743	743	743	743	743	743	743	743
Grigich Jo Reeling L.H. 375ml	373.2	373.2	373	373	389	389.4	389.4	389.4	389.4	389.4	389.4	389
hawkecrest cab sauv 750ml	96.72	96.72	373	373	96.72	96.72	96.72	96.72	96.72	96.72	96.72	99.8
hawkecrest chardonnay 750ml	96.72	96.72	96.72	96.72	96.72	96.72	96.72	99.8	99.8	99.8	99.8	99.8
hawkecrest sauv blanc 750ml	96.72	96.72	96.72	96.72	78.24		78.24	78.24	78.24	78.24	78.24	78.24
hawkecrest merlot 750ml	78.24	78.24	78.24	78.24	128	128	128	128	128	128	128	128
jollesse white zinfandel 1.5l	128	128	47.95	47.95	47.95	47.95	47.95	47.95	47.95	47.95	47.95	47.95
jollesse white zinfandel 750ml	75.05	75.05	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
jollesse sauv blanc 1.5l	75.05	75.05	59.2	59.2	63.95	63.95	63.95	63.95	63.95	63.95	63.95	63.95
jollesse sauv blanc 750ml	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05
jollesse cab sauv 1.5l	59.2	59.2	59.2	59.2	93.95	93.95	93.95	93.95	93.95	93.95	93.95	93.95
jollesse cab sauv 750ml	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05
jollesse chardonnay 1.5l	56.06	59.2	59.2	59.2	63.95	63.95	63.95	63.95	63.95	63.95	63.95	63.95
jollesse chardonnay 750ml	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05	75.05
jollesse merlot 750ml	75.05	75.05	75.05	75.05	75.05	75.05	75.05	128	128	79.9	79.9	79.9
jordan cab sauv 750ml	219	219	264	264	264	264	264	264	264	264	264	264
jordan chardonnay 750ml	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	223.2	223.2	223.2	23.2
kenwood cab sauv sonoma 750ml	152	152	152	152	158.4	158.4	158.4	158.4	158.4	158.4	165.6	165.6
kenwood cab sauv jack london 750ml	226.2	226.2	204	204	215.9	215.9	215.9	215.9	215.9	215.9	215.9	215.9
kenwood cab sauv artist series 750ml 1001	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	373.8	407.9	407.9
kenwood chardonnay 750ml	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8	142.8
kenwood chardonnay ree 92 750ml	170.6	170.6	170.6	170.6	155.9	155.9	155.9	155.9	155.9	155.9	155.9	155.9

kenwood chardonnay yakupa 750ml	139.8	139.8	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4
kenwood pinot noir jack london 750ml	170.5	170.5	204	204	204	204	204	204	204	179.9	179.9
kenwood pinot noir oliver lande 750ml	207.6	207.6	207.6	207.6	203.9	203.9	203.9	203.9	203.9	203.9	203.9
kenwood red jackson 750ml	64.32	64.32	64.32	64.32	77.75	77.75	77.75	77.75	77.75	77.75	77.75
white table 750ml	64.32	64.32	64.32	64.32	77.75	77.75	77.75	77.75	77.75	77.75	77.75
kenwood zinfandel 750ml	73.56	73.56	73.56	73.56	77.75	77.75	77.75	77.75	77.75	77.75	77.75
kenwood zinfandel 750ml	115.2	115.2	115.2	115.2	124.8	124.8	124.8	124.8	124.8	124.8	124.8
kenwood zinfandel jack london 750ml	115.2	152.2	168	168	179.9	179.9	179.9	179.9	179.9	179.9	179.9
kenwood sauv blanc 750ml	93.6	93.6	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2	100.2
kenwood sauv blanc 375ml	102.7	102.7	102.7	102.7	57	57	57	57	57	57	57
kenwood merlot 750ml	152	152	152	152	186	186	186	186	186	186	186
kenwood merlot jack london 750ml	188.6	188.6	204	204	215.9	215.9	215.9	215.9	215.9	215.9	215.9
kenwood barrel zinfandel 750ml	152.2	152.2	152.2	152.2	167.9	167.9	167.9	167.9	167.9	167.9	167.9
kenwood sauv blanc reserve 750ml	142.8	142.8	142.8	142.8	119.9	119.9	119.9	119.9	119.9	119.9	119.9
kenwood mazzone zinfandel 750ml	152.2	152.2	152.2	152.2	167.9	167.9	167.9	167.9	167.9	167.9	167.9
kenwood massara merlot 750ml	189	189	189	189	203.9	203.9	203.9	203.9	203.9	203.9	203.9
kenwood sonoma pinot 750ml	87	87	87	87	87	87	87	87	87	87	87
kenwood nunna canyon zinfandel 750ml	152.2	152.2	152.2	152.2	167.9	167.9	167.9	167.9	167.9	167.9	167.9
kenwood russian river pinot noir 750ml	143.4	143.4	143.4	143.4	158.4	158.4	158.4	158.4	158.4	158.4	158.4
king estate chardonnay 750ml	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
King estate estate pinot noir 750ml	201.5	201.5	201.5	201.5	201.5	201.5	201.5	201.5	201.5	201.5	201.5
King estate pinot gris 750ml	118.4	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
King estate pinot gris res 750ml	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4
los hermanos del valle white table 1.5l	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78
los hermanos charin blanc 1.5l	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78	39.78
metanza creek chardonnay 750ml	226.1	226.1	226.1	226.1	226.1	244.1	244.1	244.1	244.1	244.1	244.1

matanzas chardonnay 750ml	114.6	114.6	127.2	127.2	127.2	127.2	127.2	127.2	127.2	127.2	127.2
matanzas sauv blanc 750ml	149	149	149	149	149	149	149	149	149	152.4	152.4
matanzas sauv blanc 375ml	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99	72.99
matanzas merlot 750ml	289.2	289.2	150	150	150	150	150	150	150	150	150
matanzas merlot 375ml	146.2	146.2	146.2	146.2	146.2	146.2	146.2	146.2	146.2	146.2	146.2
matanzas journey chardonnay 750ml	285	285	285	285	285	285	285	285	285	285	285
matanzas pinot noir 750ml	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6	144.6
mayacamas cab sauv 750ml	414	414	414	414	414	414	414	414	414	324	324
meridian chardonnay 3l	50	50	50	50	50	50	50	50	50	50	50
meridian chardonnay 750ml	115.3	115.3	115.3	115.3	115.3	130.3	130.3	130.3	130.3	130.3	130.3
meridian edna valley chardonnay 750ml	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5
meridian special res chardonnay 1.5l	85.86	85.86	85.86	85.86	85.86	85.86	85.86	85.86	85.86	85.86	85.86
meridian pinot noir 750ml	127.4	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	136.8	136.8
meridian syrah 750ml	115.3	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8
meridian cab sauv 750ml	115.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
meridian zinfandel 750ml	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5
meridian sauv blanc 750ml	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24	81.24
meridian cab sauv 750ml	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5	147.5
meridian cab sauv 750ml	75.12	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75
nape ridge res cab sauv 750ml	119.8	119.8	119.8	119.8	119.8	119.8	119.8	119.8	119.8	142.8	142.8
nape ridge chardonnay 1.5l	73.5	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
nape ridge chardonnay 750ml	75.12	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75
nape ridge res chardonnay 750ml	119.8	119.8	119.8	119.8	119.8	119.8	119.8	119.8	119.8	119.8	142.8
nape ridge chenin blanc 750ml	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64
nape ridge gewurztramin er 750ml	75.12	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75
nape ridge sauv blanc 750ml	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64
nape ridge white zin 750ml	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64	56.64
nape ridge zinfandel 750ml	56.64	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75

nape ridge red table wine 1.5L NV	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78
Nape ridge white table wine 1.5l	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78
nape ridge pinot noir 750ml	75.12	77.75	77.75	77.75	77.75	77.75	77.75	77.75	77.75	106.2	106.2
nape ridge merlot 750ml	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
oakville ranch chardonnay 750ml	248	248	248	248	248	248	248	248	248	248	248
oakville ranch chardonnay vista 750ml	170.6	170.6	170.6	170.6	170.6	248	248	248	248	248	189
oakville ranch cab sauv 750ml	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2
oakville ranch cab sauv lewis select 750ml	288.8	288.8	288.8	288.8	288.8	288.8	288.8	288.8	288.8	288.8	288.8
oakville ranch cab sauv res 750ml	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5
oakville ranch chardonnay lewis res	244.8	244.8	244.8	244.8	244.8	244.8	244.8	244.8	244.8	244.8	244.8
remick cab sauv 750ml	189	189	189	189	189	189	189	189	189	189	189
remick chardonnay 750ml	174	174	174	174	174	174	174	174	174	174	174
riverside farm dry red 4l	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
riverside farm dry red 4l	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
riverside farm fume blanc 1.5l	49.68	49.68	49.68	49.68	59.15	59.15	59.15	59.15	59.15	59.15	59.15
riverside farm fume blanc 750ml	52.8	52.8	52.8	52.8	63.9	63.9	63.9	63.9	63.9	63.9	63.9
riverside farm cab sauv 1.5l	58.14	58.14	58.14	58.14	59.15	59.15	59.15	49.95	49.95	49.95	49.95
riverside farm cab sauv 750ml	61.2	61.2	61.2	61.2	63.9	63.9	63.9	55.4	55.4	55.4	55.4
riverside farm chardonnay 1.5l	58.14	58.14	58.14	58.14	59.15	59.15	59.15	49.95	49.95	49.95	49.95
riverside farm chardonnay 750ml	61.2	61.2	61.2	61.2	63.9	63.9	63.9	55.4	55.4	55.4	55.4
riverside farm zinfandel 1.5l	58.14	58.14	58.14	58.14	58.14	58.14	58.14	58.14	58.14	58.14	58.14
riverside farm white zinfandel 1.5l	40.44	40.44	40.44	40.44	41.5	41.5	41.5	40.5	40.5	40.5	40.5
riverside farm white zinfandel 750ml	43.56	43.56	43.56	43.56	43.8	43.8	43.8	43.8	43.8	43.8	43.8
riverside farm white zinfandel 750ml(15pt)	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12
riverside farm chenin blanc 1.5l	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12	48.12
St Francis chardonnay barrel select 750ml	172.8	172.8	172.8	172.8	172.8	172.8	172.8	172.8	172.8	172.8	172.8
St Francis chardonnay sonoma 750ml	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9

St Francis gewurztraminer 750ml	95.28	95.28	95.28	95.28	95.28	95.28	95.28	95.28	95.28	95.28	95.28
St Francis jo rearing 750ml	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
St Francis merlot 750ml	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	198.6	198.6
St Francis merlot res 750ml	231	231	231	231	231	231	231	275.4	275.4	275.4	275.4
St Francis sauvignon 750ml	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2
St Francis Cab Sauv sonoma 750ml	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9	107.9
St Francis Zinfandel 750ml	140.8	140.8	140.8	140.8	181.8	181.8	181.8	181.8	181.8	181.8	181.8
Sequoia grove cab sauv estate 750ml	248.4	248.4	248.4	248.4	266.4	266.4	266.4	266.4	266.4	266.4	266.4
Sequoia grove cab sauv 750ml	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2	172.2
Sequoia grove chardonnay carneros 750ml	136.6	141	141	141	141	141	141	141	141	141	141
Sequoia grove hardonnay napa 750ml	177.9	183	183	183	183	183	183	183	183	183	183
Silverado chardonnay 750ml	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6	153.6
Silverado res chardonnay 300ml	138	138	138	138	153.6	153	153	153	153	150	150
Silverado Sauv blanc 750ml	92.4	92.4	92.4	92.4	92.4	92.4	92.4	98.4	98.4	98.4	98.4
Silverado late harvest ltd reserve	192	192	192	192	192	192	192	192	192	192	192
Silverado cab sauv 750ml	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6	189.6
Silverado LTD res merlot 750ml	192	192	192	192	192	192	192	192	192	204	204
Silverado Merlot 750ml	177.6	177.6	177.6	177.6	177.6	177.6	177.6	177.6	177.6	192	192
stags leap cab sauv 750ml	207.6	207.6	207.6	207.6	207.6	207.6	207.6	226.2	226.2	226.2	226.2
stags leap cab sauv 750ml	304.6	304.6	304.6	304.6	304.6	304.6	304.6	323.9	323.9	323.9	323.9
stags leap chardonnay 750ml	207.6	207.6	207.6	207.6	207.6	207.6	207.6	226.2	226.2	226.2	226.2
stags leap white rearing 750ml	87.48	87.48	87.48	87.48	97.2	97.2	97.2	97.2	97.2	97.2	97.2
stags leap chardonnay res 750ml	300	300	300	300	300	300	300	300	300	300	300
stags leap merlot 750ml	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1
stags leap sauv blanc 750ml	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
stone creek merlot 750ml	70.8	70.8	70.8	70.8	87.85	87.85	87.85	87.85	87.85	87.85	87.85
summit box sine burgundy 18l	31.88	31.88	31.88	31.88	31.88	31.88	36.85	36.85	36.85	36.85	36.85
summit box wine burgundy 6l	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56

summit box white 1.5l	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56
summit box wine chablis 1.5l	31.88	31.88	31.88	31.88	31.88	31.88	36.85	36.85	36.85	36.85	36.85	36.85
summit box wine french colombard 5l	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56
summit box wine white grenache 5l	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56
summit box wine white zinfandel 5l	51.24	51.24	51.24	51.24	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5
summit box wine blush white 1.5l	31.88	31.88	31.88	31.88	31.88	31.88	36.85	36.85	36.85	36.85	36.85	36.85
summit box wine blush white 5l	38.56	38.56	38.56	38.56	38.56	38.56	36.85	36.85	36.85	36.85	36.85	36.85
summit box wine chenin blanc 5l	38.56	38.56	38.56	38.56	38.56	38.56	36.85	36.85	36.85	36.85	36.85	36.85
summit box wine cab sauv 5l	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24
summit box wine cab sauv 4l	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24
summit box wine chardonnay 4l	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24	51.24
summit box wine chardonnay 5l	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
talbot chardonnay 750ml	252	252	252	252	252	252	252	252	252	273	273	273
talbot chardonnay 375ml	132	132	132	132	132	132	132	144	144	144	144	144
talbot logan chardonnay 250ml	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9	119.9
diamond T estate 750ml	168	168	168	168	336	336	336	336	336	336	336	336
talbot cuvee guyot 375ml	204	204	204	204	204	204	204	204	204	204	204	204
talbot cuvee guyot 750ml	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor table wine chablis 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor table wine 750ml	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
taylor table wine 1.5l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor table wine rhine 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor table wine light rhine 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor white grenache 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor french colombard 1.5l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor chenin blanc 5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor chenin blanc 1.5l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor white zinfandel 5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor white zinfandel 1.5l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77

taylor grenache 3l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor grenache 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor light white zinfandel 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor blush 3l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor blush 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor blush 750ml	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
taylor light blush 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor rose 3l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor rose 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor rose 750ml	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33	38.33
taylor light burgundy 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor burgundy 3l	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77	33.77
taylor burgundy 1.5l	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96	29.96
taylor classic varietals classic chardonnay 1.5l	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76
taylor classic varietals classic cabernet sauv 1.5l	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76	43.76
taylor classic varietals classic white zinfandel 1.5l	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3
taylor box wines blush 4l	37.97	37.97	37.97	37.97	37.97	37.97	37.97	37.97	37.97	37.97	37.97
taylor rest pack chablis 58.6l	96	96	96	96	96	96	96	96	96	96	96
taylor rest pack chablis 30l	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
taylor rest pack chablis 18l (E-Z serv)	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
Taylor rest pack chablis 18l box	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
taylor rest taylor rest pack blush 30l	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
taylor rest pack blush 30l	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
taylor rest pack blush 18l (E-Z serv)	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
Taylor rest pack blush 18l box	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
taylor rest pack blush 4l	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
taylor rest pack rose 30l	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5
taylor rest pack rose 18l (E-Z Serv)	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
taylor rest pack rose 4l	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
taylor rest pack burgundy 30l	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5

taylor rest peck burgundy 18l	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
taylor rest peck burgundy 18l box	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
Taylor rest peck burgundy 4l	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
taylor NY lake country white 3l	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57
Taylor NY lake country white 1.5l	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
Taylor NY lake country 750ml	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
Taylor NY lake country gold 3l	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57
Taylor NY lake country 750ml	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
Taylor NY lake country pink 3l	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57
Taylor NY lake country pink 1.5l	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
Taylor NY lake country pink 750ml	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
taylor NY lake country red 3l	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57	34.57
taylor NY lake country red 1.5l	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2	34.2
taylor NY lake country red 750ml	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
taylor NY Table wines sauveme 1.5l	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
Taylor NYU table sauveme 750ml	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53
Taylor NY table pink 1.5l	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
Taylor NY table wine pink catenwa 750ml	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53
Taylor NY table sangria 1.5l	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
Taylor NY table sangria 750ml	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53	48.53
Taylor NY table chablis 1.5l	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
three oaks red table 4l	27	27	27	27	27	27	27	27	27	27	27	27
three oaks blush 4l	27	27	27	27	27	27	27	27	27	27	27	27
three oaks white table 4l	27	27	27	27	27	27	27	27	27	27	27	27
vine cliff cab 750ml	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4	281.4
winery merlot 750ml	118	118	118	118	118	118	118	118	118	118	118	118
wheeler winery cab 750ml	118	118	118	118	118	118	118	118	118	118	118	118
winery chardonnay 750ml	118	118	118	118	118	118	118	118	118	118	118	118

winery zinfandel 750ml	118	118	118	118	118	118	118	118	118	118	118
wheeler winery, fume blanc 750ml	83	83	83	83	83	83	83	83	83	83	83
wild horse cab sauv 750ml	139.8	139.8	139.8	139.8	144	144	144	144	144	144	144
wild horse cab sauv 750ml	152.6	152.6	152.6	152.6	163.2	163.2	163.2	163.2	163.2	163.2	163.2
wild horse pinot noir 750ml	152.6	152.6	152.6	152.6	152.6	152.6	152.6	152.6	152.6	152.6	152.6
wild horse pinot noir 375ml	81	81	81	81	84.6	84.6	84.6	84.6	84.6	84.6	84.6
wild horse pinot blanc 750ml	120	120	120	120	120	120	120	120	120	120	120
wild horse malvasia blanco 750ml	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8
wild horse chardonnay 750ml	139.8	139.8	139.8	139.8	144	149.4	149.4	149.4	149.4	149.4	149.4
wild horse total italiano 750ml	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8	139.8
wild horse cheval sauv pinot 750ml	132	132	132	132	132	132	132	132	132	132	132
willam hill winery cab sauv res 750ml 1980	225.9	225.9	225.9	225.9	225.9	225.9	225.9	225.9	225.9	225.9	225.9
willam hill winery cab sauv res 375ml 1980	125.3	125.3	125.3	125.3	125.3	125.3	125.3	125.3	125.3	125.3	125.3
willam hill winery chardonnay res 750ml	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
willam hill winery chardonnay res 375ml	911.4	911.4	911.4	911.4	911.4	911.4	911.4	911.4	911.4	911.4	911.4
willam hill cab sauv silver label 750ml	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
willam hill chardonnay silver label 750ml	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3	115.3
wilson daniels chardonnay 750ml	152	152	152	152	111.8	111.8	111.8	119.9	119.9	119.9	119.9

VITA

Michael Joseph Hicks was born on August 8, 1962 in Baltimore, and has subsequently lived in Colorado, Maryland, Virginia, New Jersey, Georgia, Indiana and Tennessee. He is a 1980 graduate of Langley High School in Fairfax County, Virginia. He received a Bachelor of Arts in economics from Virginia Military Institute, and was commissioned a Second Lieutenant in the United States Army Infantry in 1984. He subsequently served as Executive Officer and Acting Commander of Company E, 3rd Battalion, 26th Infantry (Basic Combat Training) at Ft. Dix, NJ from 1985-1988. Later assignments included Air Operations Officer for 2nd Battalion, 7th Infantry (Mechanized), where he served with the Egyptian Army in Operation Bright Star.

He fought in the Persian Gulf War with the 24th Infantry Division (Mechanized), participating in the attack into Iraq with the Victory Division's Tactical Command Post and was awarded the Bronze Star Medal for service at the Battle of Rumalyah. Following Desert Storm he was given command of the 24th Division's Assault Command Post by then Major General Barry McCaffrey.

During Operation Desert Shield he received an "Any Soldier Letter" from a Butler University Student, Janet Leigh Thomas. He is now married to Janet, a Dental Hygienist. After leaving active duty in 1992 he has done graduate work in Economics at Indiana State University, in Terre Haute, Indiana. Major and Mrs. Hicks reside in Blount County, Tennessee where he is a Visiting Research Assistant Professor, Center for Business and Economics Research, and Visiting Assistant Professor, Department of Economics, University of Tennessee, Knoxville.