RSQE FORECASTS

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The Michigan Economic Outlook for 2009–2010

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I. Introduction

It would appear that someone has wished upon Michigan the ancient Chinese curse, "May you live in interesting times." The word *interesting* is, of course, meant to imply interesting in an unpleasant way. Looking at how things have been going, we deduce that ours is a dual curse, containing two interesting unpleasantries: "difficult" and "uncertain."

After enduring an eight-year stretch of employment decline tracing back to mid-2000, the Michigan economy now faces the confluence of recession in the U.S. economy and the very real fear of bankruptcy among major players in its core industry, domestic automobile manufacturing. What seems clear is that the hard times in Michigan are here to stay for a while longer—part one of the curse is in play.

The obvious follow-up questions are, "How bad will it be, and for how long?" This is where the uncertainty kicks in; these are doubtless the most uncertain times we have faced in the state since we started forecasting the Michigan economy thirty-six years ago. Our forecast of where Michigan is heading is influenced by our current view on the prospects for the U.S. economy through 2010,

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"The Michigan Model"

including some sizeable caveats, which was presented earlier. The other major influence on "where to from here" for Michigan is, as always, the state of affairs with the domestic nameplate automakers—and this time the picture is less obvious, and the situation is more urgent. The nosedive in the retail market for vehicles, spurred by the combination of surging gasoline prices and a disastrous liquidity crisis, has put the industry in danger of being unable to fund its U.S. operations.

We expect, with a high degree of confidence, that some form of rescue package will be approved by the federal government, either soon or early next year. The potential consequences of myriad alternatives are impossible to predict at this point, but none of them is any good for Michigan. Even with a rescue program as an expected outcome, uncertainties still reside in the details. The conditions that will be tied in with such a capital infusion or loan are unknown at this time. The agreement will certainly—and appropriately—come with strings attached; the money will not be offered to fund the automakers' Jobs Bank program. It's difficult to imagine how events could be more unsettling in Michigan at present—part two of the curse is in play.

The hope is for the domestic auto industry to get through its own liquidity crisis, and then to move toward a more stable and profitable—albeit smaller—enterprise. Regardless of how we feel about it, stability in the state's core industry is essential for the economy as a whole to grow and prosper.

This is not to say that we should not be pushing forward with even greater urgency to establish a more diversified local economy. After all, one of our major newspapers in the state pleaded for such action in an editorial—an editorial that now marks its fiftieth anniversary. As a longer-term strategy, we have argued the case for a more knowledge-based economy so many times that it has become trite. In the shorter term, we identify some ventures that have actually gained some ground during our long winter. We drill down into the data, and we do find a few nuggets. It can be productive, and heartening, to seek out some hopeful signs in an economic and fiscal outlook that over our two-year forecast horizon is sobering. And this is coming off a performance in 2008 that has been less than cheery.

We now move to a glimpse at 2008, both to learn more about what kind of year it has been and to gauge how well we anticipated this year's developments at last year's Economic Outlook Conference.

II. Review of the Forecast for 2008

In the early 1970s, both the State of Michigan and the university administration requested production of a periodic state forecast to assist in their respective planning efforts. In 1972, the first Michigan forecast was delivered to attendees of the Economic Outlook Conference, and today marks the thirty-seventh such presentation on the outlook for the Michigan economy. The track record for each of the previous thirty-six forecasts is set forth in summary form in Table 1.

How well did we do at last year's outlook conference in anticipating developments in the Michigan economy of 2008? That can be gleaned from the bottom line of the table. First, the information in this line confirms that 2008 has not been a very good year for the Michigan economy, indeed the weakest year for payroll employment growth since 2003. When we include our estimates for the last three months of the year, employment registers a decline of 1.6 percent for 2008. The only positive finding in this outcome is that we were almost spot-on in forecasting it, with a forecast error of only a tenth of one percentage point—we were 3,600 jobs too low.

Of course, when we dig down to check our performance based on the underlying industry data, we find the usual pluses and minuses that make up the overall forecast error. Even here, though, the errors are respectable. Our forecasts were a little high on manufacturing employment because of the auto industry. The source of this error can be traced to our forecast for Detroit Three vehicle sales, which at last year's conference we pegged at 7.8 million units for 2008, and which we now estimate as coming in at 6.1 million units, a shortfall of 1.7 million units. The miss is a combination of being too optimistic on total light vehicle sales—16 million units for 2008 predicted last November compared with 13.3 million units estimated now—and being too high on Detroit Three market share.

Table 1
Review of RSQE Forecast of Employment and Income
in the State of Michigan

Year	Percent Change in Michigan Wage and Salary Employment		Percent Change in Michigan Personal Income	
	RSQE[1] Forecast	Observed	RSQE[1] Forecast	Observed
1973	4.6	5.4	9.6	12.3
1974	1.5	– 0.2	7.4	7.2
1975	–1.3	– 4.3	5.8	6.4
1976	3.4	4.7	12.7	12.6
1977	2.1	4.8	11.4	12.6
1978	2.8	4.8	11.2	11.2
1979	– 0.6	0.8	8.3	10.0
1980	– 2.5	– 5.3	6.1	7.1
1981	2.2	– 2.3	10.8	7.1
1982	– 0.9	– 5.1	7.1	2.9
1983	1.0	0.9	7.0	6.0
1984	5.5	4.9	11.3	10.8
1985	2.6	5.3	8.0	8.5
1986	1.3	2.7	4.8	6.2
1987	1.8	2.1	3.8	3.5
1988	0.3	2.2	3.7	6.4
1989	1.8	2.7	6.4	7.4
1990	1.3	0.6	6.0	4.5
1991	– 0.4	– 1.6	5.0	3.1
1992	0.7	0.9	5.1	6.1
1993	0.3	2.0	4.9	4.6
1994	1.1	3.6	4.7	8.1
1995	2.1	3.1	6.4	4.4
1996	1.6	2.0	4.6	4.3
1997	1.6	2.0	5.1	4.9
1998	1.2	1.7	4.8	6.5
1999	1.4	1.6	3.5	4.9
2000	1.4	2.0	5.2	5.8
2001	0.5	– 2.5	4.6	1.8
2002	– 0.6	–1.7	2.3	1.3
2003	– 0.3	–1.6	3.5	3.3
2004	0.8	– 0.4	4.9	1.7
2005	0.8	– 0.2	4.7	2.1
2006	– 0.2	– 1.4	4.9	2.3
2007	– 0.7	– 1.5	3.3	4.0
2008	– 1.7	– 1.6[2]	1.6	2.6[2]

[1]Forecast presented at the Economic Outlook Conference of the preceding year.
[2]Estimated by RSQE as of November 2008.

In contrast, our employment forecast was a little too low for private nonmanufacturing and government. The largest misses were in three industry categories: trade, transportation, and utilities (including retail trade); government; and professional and business services. The first two of these have been chronically weak performers for several years now, and we anticipated correctly that they would continue to lose jobs in 2008. In both cases, however, they lost fewer jobs than we forecast. Professional and business services also lost fewer jobs than we projected. In this case, we expected that the auto industry would reduce its white-collar work force (classified in this industry category) more rapidly than it has. Our forecast errors for all of the sectors not highlighted here cumulate to less than 2,000 jobs, with none of them standing out individually.

Turning to the income side of last year's forecast, we weren't as accurate as we were for employment. Last November we forecast a gain of 1.6 percent in state personal income for 2008, and our current estimate is an increase of 2.6 percent. So, our forecast was too low on personal income, and three of its components tell most of the story. First, we were too low on the wage and salary component, particularly in the private sector, in part because we assumed that the two-tier wage provision in the auto contract ratified last year would be in play this year and that it would have an impact on average earnings per worker in the Michigan economy. In fact, relatively few of these workers have been hired in the past year, simply because there have been relatively few hires in the industry, period.

Second, we were also too low on the transfer payment component of personal income. Since our forecast last November, Congress passed legislation creating an Emergency Unemployment Compensation (EUC) fund to provide an additional thirteen weeks of unemployment benefits to workers in states facing high unemployment, and that included Michigan. Also, at the time of our forecast, we did not know that a portion of the tax rebate checks from this year's stimulus program—for those who did not owe taxes or whose rebates exceeded their taxes paid—would be treated as transfer payments. In fact, the stimulus program itself had not yet even surfaced at that time. In contrast, we were too high

on property income (dividends, interest, and rent), largely because we didn't anticipate the drop in interest rates that ensued, thus affecting interest income.

Our forecast of the State's general fund general purpose (GFGP) tax revenue for fiscal year 2008 was too high by $159 million. This very small error can be traced to two main culprits. First, at the time of the Economic Outlook Conference last November, the state legislature had passed a use tax on services to go into effect on December 1, but it was clearly in trouble. We assumed that the tax would be replaced, but we didn't know what the replacement would be, so we put a placeholder in our forecast for an amount equivalent to what had been estimated for the service tax. Instead of the use tax on services, however, a surcharge on the Michigan Business Tax (MBT) was implemented. Included in our forecast were the revenues expected from the use tax on services combined with the GFGP portion of the original MBT. That amount turned out to be $214 million higher than what in fact came into the general fund from the MBT including the surcharge, more than accounting for our error of $159 million. Second, we were $88 million too low on GFGP income tax revenue because we were too low on income. Other than these two items, our forecast record on the rest of the items in GFGP tax revenue is made up of small offsetting positive and negative errors.

This review gives us some idea of what sort of year 2008 was in Michigan. We need to take a much more detailed look at the current state of the Michigan economy, however, before we scope out where we're heading beyond 2008. We'll now proceed with that purpose in mind.

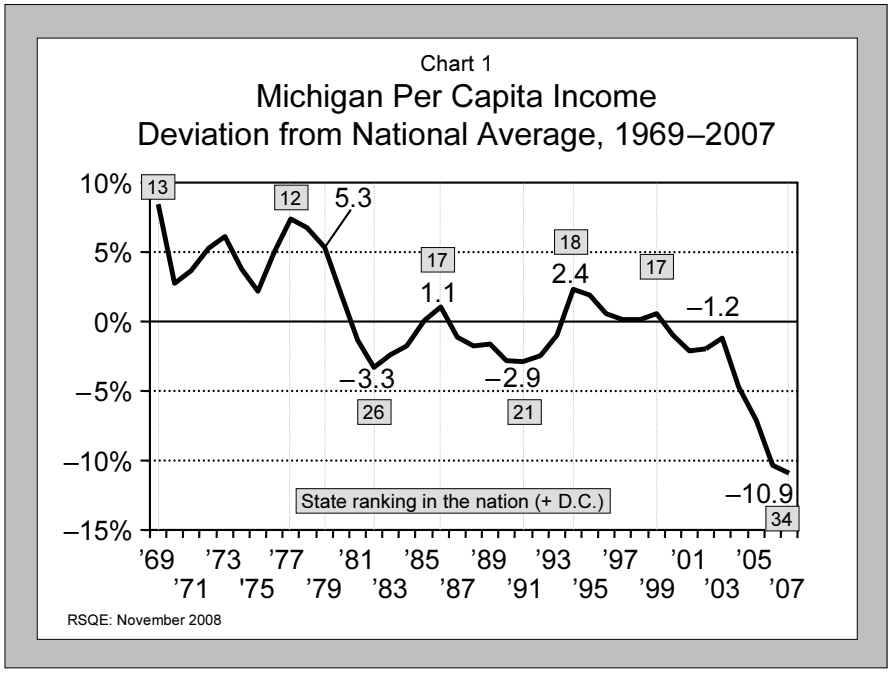
III. Current State of the Economy

In the previous section, our point of emphasis was that we were quite accurate in our forecast of a weak economy for 2008. Here, we focus on the weak economy itself, and try to form a better picture of our current plight. We first expand our time horizon to provide some context for what is happening in Michigan now, and why. Second, we take a peek at industry performance at a very detailed level over the past five years, to gather more insight into the comings and goings that move the Michigan

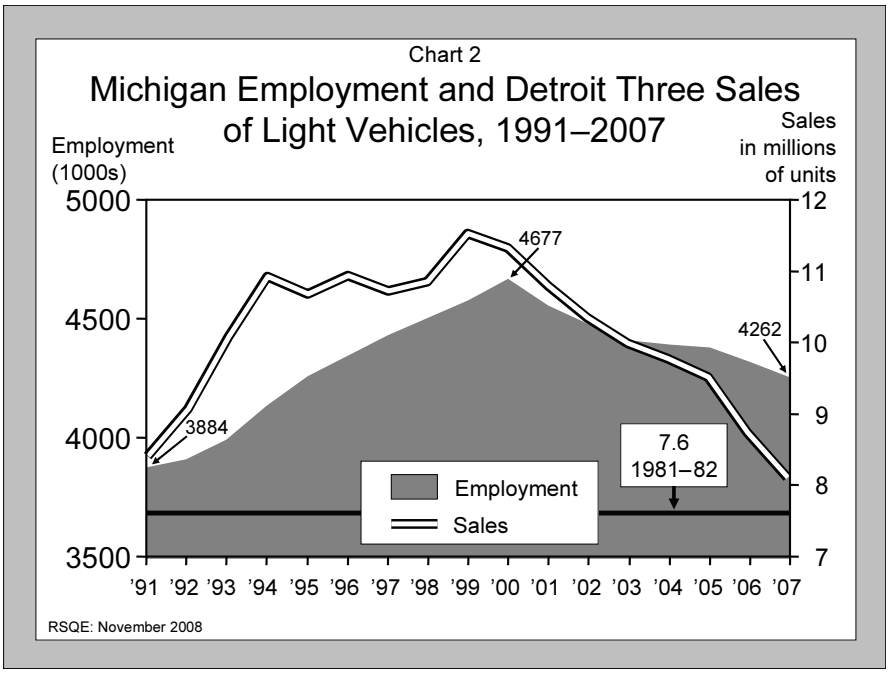
economy. We find a hopeful sign here: when we peer through this microscope, we uncover growing enterprises in numbers that might be surprising in our sliding state economy. And third, we return to 2008 to take a closer look at what's been happening so far during the year. Scoping out the current economy is a prerequisite to anticipating where the economy is heading over the next few years.

A. The Michigan Economy over the Years

For our historical perspective on the Michigan economy, we start by considering the trend in the state's per capita income, a measure often regarded as the single best indicator of a region's economic welfare. Michigan's per capita income from 1969 to 2007 is shown in Chart 1, where it is measured as a deviation from the national average. Thus, a reading of zero indicates the same level of income per person in the state as in the nation. During most of the 1970s, Michigan's per capita income hovered around 5 percent above the U.S. average. After the 1979–82 recession, the state's reading fluctuated about on par with the national average. Since 2002, however, Michigan's income per person has nosedived relative to the nation, falling almost 11 percent below the U.S. average by 2007 according to the latest data. And its ranking among the fifty-one states (including Washington, D.C.) plummeted from 17th in 1969, the last year per capita income in the state exceeded the nation, to 34th



in 2007.[1] The only other drop of comparable size was during the 1979-82 recession, when it fell from 12th to 26th place.



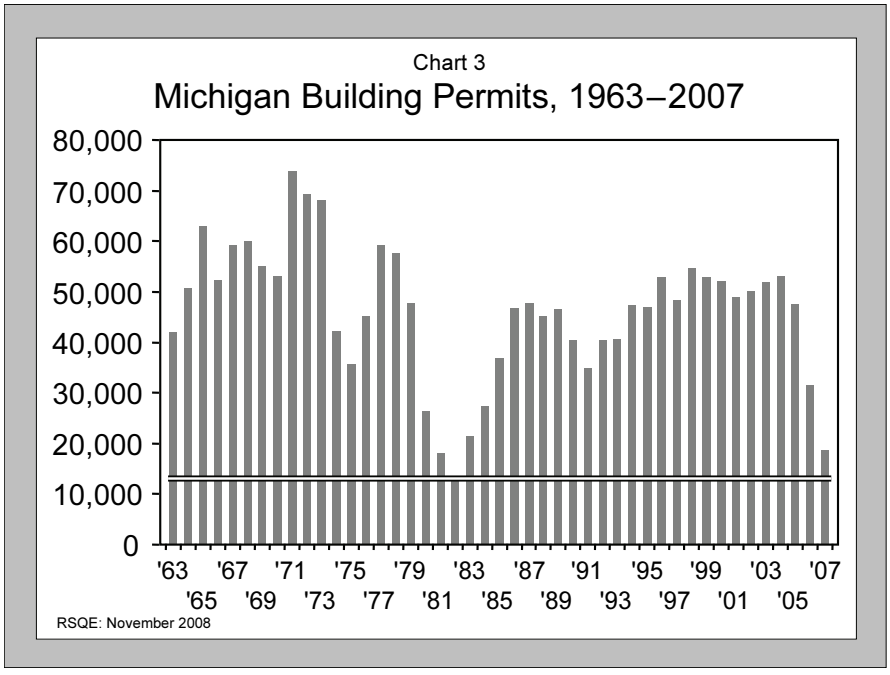
What's going on here? The short answer is that Michigan has been losing jobs, a disproportionate number of them higher-paying. To confirm this, we first profile all wage and salary workers with the aid of Chart 2. Between 1991 and 2000, Michigan gained 793,000 jobs, and then from 2000 to 2007 lost over half of them, 415,000 in total. There are a number of reasons for the retrenchment, but one of them is overarching: the shrinkage of the domestic nameplate auto industry, namely General Motors, Ford, and Chrysler. As shown by the sales line in the chart, Detroit Three light vehicle sales tumbled from 11.5 million units in 1999 to 8.1 million in 2007. This amounts to a 30 percent drop in sales in eight years, with sales approaching their 1981–82 levels of 7.6 million units, the lowest since the starting point of our data set in 1979.

The fundamental relationship between movements in the domestic auto industry and the performance of the Michigan economy can be inferred by the striking correlation between auto sales and Michigan employment, which comes clearly into view in Chart 2. And keep in mind, the trajectory for employment represents total establishment employment, not auto or manufacturing employment.

[1] Excluding Washington, D.C., the rankings would move up by one digit for each of the tags in the chart. A ranking of one indicates the highest per capita income among states in the nation.

This is not so surprising, though, if we also enter into evidence the fact that Michigan is over twelve times as concentrated in Detroit Three employment as the nation.

If we segment the chart by time interval, we can make the not-too-surprising observation that, for the most part, the sales and employment paths rise together and fall together. Less obvious, but important to where the Michigan economy might be heading in the future, is the observation gleaned from the chart that even a stable sales level corresponds with rising employment. This can't be taken as gospel, of course, without more evidence. But it does suggest that at least a stable auto or manufacturing base can support a growing local economy overall.



So, the fundamental problem in Michigan is its ultra-concentration in an industry that is floundering. Anything else is a second-order problem, but there are other problems. A significant one, although not in the same structural sense as autos, is Michigan's participation in the national housing slump. This is apparent in Chart 3, which shows the number of residential building permits issued annually in Michigan from 1963 to 2007. After a solid run since the mid-1990s, a sharp decline in homebuilding activity set in after 2005. As shown by the horizontal line in the chart, permits in 2007 were only slightly above the number issued in 1982, which was the weakest performance in the forty-five years represented here. This sharp contraction in the construction industry has added significantly to the overall employment drop in the state.

Plainly, employment losses in recent years have been precipitous, pulling down autoworkers, who are compensated well above the average wage in the state, as well as construction workers, who also receive above-average pay. Our earlier claim that Michigan has lost a disproportionate number of higher-paying jobs overall, though, awaits the information displayed in the next table to be supported conclusively.

B. Growing and Declining Industries in Michigan for 2002–07

To get a feel for the underlying churning in the Michigan labor market over the past five years, including the income effects of these job movements, we have assembled a data set for 2002 and 2007 that breaks out employment and wages for 1,060 private nonfarm industries in Michigan. The industry categories were based on the six-digit North American Industrial Classification System (NAICS) for 2007. Three major adjustments were made to the raw published data. First, official data come with suppressions for a significant number of these highly disaggregated industry categories, and the missing cells were estimated by a field-tested algorithm developed by Donald Grimes, one of our colleagues at the University.[2] Second, corrections have been made for changes in classification codes between 2002 and 2007, to ensure that consistent industry definitions are being compared over time. And third, the disaggregate information has also been aggregated to match the private-sector industry breakouts that appear in our forecast.[3] The information is organized and summarized in Table 2.

The table reports a loss of 183,000 private-sector nonfarm jobs from 2002 to 2007, consistent with the negative jobs profile that we have already highlighted. Some of the movements underlying this number, however, offer a more enlightening story. We start with the good news: first, of the 1,060 private-sector industries isolated, 419 of them, or 40 percent, either gained employment over the five-year period, or at least did not decline—a surprising result considering that every one of the supersectors shown in the table registers declining employment save two: the private education and

[2] In addition to developing this algorithm, Mr. Grimes made a significant and much appreciated contribution to this entire section.

[3] The employment numbers are not an exact match between the two data sets; there is a 1.7 percent discrepancy for private-sector employment in 2007. This does not affect any of the conclusions reported in this section.

Table 2

Growing and Declining Industries in Michigan, 2002–07, by Major Division According to 6-Digit NAICS Code

Industry/Status	Number of Industries	Michigan Employment			U.S. Employment		Employment Growth (%) 2002–07		Michigan Average Wage
		2002	2007	Change 2002–07	2002	2007	Michigan	U.S.	2007
Total private nonfarm	N.A.	3,726,516	3,543,168	–183,348	106,816,400	113,251,141	–4.9	6.0	43,267
Growing or unchanged	419	1,493,461	1,698,384	204,923	50,173,353	56,270,969	13.7	12.2	36,095
Declining	641	2,224,534	1,820,614	–403,920	56,051,787	56,415,238	–18.2	0.6	49,996
Unclassified, rounding, or not in Michigan	N.A.	8,521	24,170	15,649	591,260	564,934	183.7	–4.5	40,355
Natural resources and mining	30	10,777	10,035	–742	787,574	946,949	–6.9	20.2	49,061
Growing or unchanged	13	3,228	4,166	938	532,021	690,236	29.0	29.7	56,705
Declining	17	7,549	5,869	–1,680	255,553	256,713	–22.2	0.5	43,635
Construction	50	199,006	162,416	–36,590	6,683,558	7,562,736	–18.4	13.2	48,958
Growing or unchanged	7	10,246	10,788	542	327,890	402,008	5.3	22.6	59,499
Declining	43	188,760	151,628	–37,132	6,355,668	7,160,728	–19.7	12.7	48,208
Transportation equipment manufacturing	29	292,725	203,993	–88,732	1,766,693	1,654,218	–30.3	–6.4	76,013
Growing or unchanged	6	3,902	4,548	646	406,242	431,723	16.6	6.3	52,854
Declining	23	288,823	199,445	–89,378	1,360,451	1,222,495	–30.9	–10.1	76,541
Other durables manufacturing	231	308,682	273,965	–34,717	7,532,367	7,002,985	–11.2	–7.0	52,842
Growing or unchanged	86	61,204	80,653	19,449	2,554,017	2,604,851	31.8	2.0	48,748
Declining	145	247,478	193,312	–54,166	4,978,350	4,398,134	–21.9	–11.7	54,550
Nondurable goods manufacturing	179	157,387	142,751	–14,636	5,638,820	4,947,274	–9.3	–12.3	49,992
Growing or unchanged	70	32,353	44,271	11,918	1,919,499	1,795,749	36.8	–6.4	52,159
Declining	109	125,034	98,480	–26,554	3,719,321	3,151,525	–21.2	–15.3	49,017
Trade, transportation, and utilities	212	828,108	776,769	–51,339	25,217,092	26,337,312	–6.2	4.4	36,880
Growing or unchanged	80	209,385	240,378	30,993	7,529,340	8,596,447	14.8	14.2	41,122
Declining	132	618,723	536,391	–82,332	17,687,752	17,740,865	–13.3	0.3	34,980
Information	31	73,478	64,324	–9,154	3,364,487	3,029,789	–12.5	–9.9	56,375
Growing or unchanged	10	6,567	7,704	1,137	413,693	423,376	17.3	2.3	52,006
Declining	21	66,911	56,620	–10,291	2,950,794	2,606,413	–15.4	–11.7	56,970
Financial activities	61	209,119	205,350	–3,769	7,706,264	8,145,984	–1.8	5.7	51,740
Growing or unchanged	28	62,061	70,942	8,881	2,469,173	2,747,390	14.3	11.3	52,031
Declining	33	147,058	134,408	–12,650	5,237,091	5,398,594	–8.6	3.1	51,586
Professional and business services	92	591,241	573,531	–17,710	15,939,599	17,859,794	–3.0	12.0	54,872
Growing or unchanged	40	284,257	319,786	35,529	8,519,066	9,702,403	12.5	13.9	38,807
Declining	52	306,984	253,745	–53,239	7,420,533	8,157,391	–17.3	9.9	75,118

Table 2 (continued)

Growing and Declining Industries in Michigan, 2002–07, by Major Division According to 6-Digit NAICS Code

Industry/Status	Number of Industries	Michigan Employment			U.S. Employment		Employment Growth (%) 2002–07		Michigan Average Wage
		2002	2007	Change 2002–07	2002	2007	Michigan	U.S.	2007
Private education and health services	56	514,354	575,827	61,473	15,346,719	17,433,165	12.0	13.6	39,647
Growing or unchanged	42	478,951	544,629	65,678	14,507,972	16,510,748	13.7	13.8	40,080
Declining	14	35,403	31,198	–4,205	838,747	922,417	–11.9	10.0	32,095
Leisure and hospitality services	40	396,817	401,967	5,150	11,995,952	13,327,560	1.3	11.1	15,318
Growing or unchanged	21	291,181	314,322	23,141	9,478,892	10,717,700	7.9	13.1	14,583
Declining	19	105,636	87,645	–17,991	2,517,060	2,609,860	–17.0	3.7	17,952
Other services	49	136,301	128,070	–8,231	4,246,015	4,438,441	–6.0	4.5	26,611
Growing or unchanged	16	50,126	56,197	6,071	1,515,548	1,648,338	12.1	8.8	20,380
Declining	33	86,175	71,873	–14,302	2,730,467	2,790,103	–16.6	2.2	31,483
Addendum:									
Crop and animal production	N.A.	19,481	21,480	1,999	760,881	761,080	10.3	0.0	22,333
Growing or unchanged	27	13,742	17,540	3,798	476,376	496,517	27.6	4.2	22,193
Declining	12	5,740	3,940	–1,800	234,250	189,388	–31.4	–19.2	22,954
Rounding or not in Michigan	N.A.	–1	0	1	50,255	75,175	N.A.	N.A.	N.A.
Federal government	N.A.	55,708	53,651	–2,057	2,758,627	2,726,300	–3.7	–1.2	59,197
State government	N.A.	142,368	139,985	–2,383	4,485,071	4,611,395	–1.7	2.8	51,958
Local government	N.A.	446,137	420,838	–25,299	13,412,941	14,016,190	–5.7	4.5	40,306

Note 1: Industries are categorized by their growing or declining employment status in Michigan; U.S. comparisons are based on the same categories.

Note 2: 2007 data reflect 2007 NAICS codes while 2002 data reflect 2002 codes; industries have been combined where necessary to ensure compatibility. Undisclosed data were estimated by Donald Grimes, University of Michigan.

health services category, and leisure and hospitality services.[4] Second, almost 221,000 jobs were created over the period by a combination of industries that were growing and enterprises not classified by industry. There were growing industries in all of the supersectors in Michigan, including the oft-maligned manufacturing sector, which contained 162 subindustries that grew jobs over the period.

Of course, our microscope enlarges on the bad news as well. Our 641 declining industries were hit hard over the period, with a loss of 404,000 private-sector jobs, a drop of 18.2 percent. Furthermore, our growing industries pay less than our declining industries—an average wage of $36,095 versus $49,996, respectively.[5] Greater job losses than job gains, and a higher than average wage associated with the lost jobs, confirm our claim that Michigan has been losing a disproportionate number of higher paying jobs overall—although within some of the supersectors, the job gainers pay more. It's easy to lay much of this on the doorstep of the rapidly declining portion of the auto manufacturing industry; after all, the average wage there is over $76,000, the highest of the wages reported in Table 2. But a close second are the wages connected with the declining portion of the professional and business service industries, which pay much more than our growing industries in this category. Some of this movement is auto-related as well, since white-collar auto employees are classified here, but a good piece of it is not.

Much of the detail on industry employment and wages is hidden in Table 2. We have assembled Table 3 to give a flavor of the movements at a finer level of disaggregation. The table is laid out in the same format as Table 2, except that it isolates the top fifteen industries with the greatest absolute job decline in Michigan between 2002 and 2007 in the top panel, and the top fifteen industries with the greatest job increase in the bottom panel, out of the 1,060 private-sector industries pulled from the data.

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[4] The growing/declining categorization was not applied to the government industries because of large changes in classification over the period. Also, the crop and animal production category was pulled out of the natural resources sector in the detailed data to be more consistent with the data set we use in our forecast.

[5] The data include both part-time and full-time workers, so average wages in those industries with a large part-time work force will be understated compared with a calculation that adjusts for hours worked. Also, the wage values do reflect averages, and within any given industry category there could be workers compensated well below or well above the average wage for the industry.

Table 3

Industries with the Greatest Number of Job Gains and Losses in Michigan between 2002 and 2007

Status	NAICS	Michigan Employment 2002	Michigan Employment 2007	Michigan Employment Change 2002–07	U.S. Employment 2002	U.S. Employment 2007	Employment Growth 2002–07 (%) Michigan	Employment Growth 2002–07 (%) U.S.	Average Wage Michigan 2007
Industries with the greatest job decline in Michigan									
➢Automobile manufacturing	336111	65,684	48,672	–17,012	159,795	129,825	–25.90	–18.76	96,087
Managing offices	551114	64,597	54,001	–10,596	1,598,912	1,744,374	–16.40	9.10	99,922
➢Motor vehicle metal stamping	336370	44,651	34,489	–10,162	105,648	88,591	–22.76	–16.15	60,775
➢All other motor vehicle parts manufacturing	336399	32,765	23,696	–9,069	162,943	149,041	–27.68	–8.53	58,931
Supermarkets and other grocery stores	445110	68,589	60,336	–8,253	2,323,927	2,333,076	–12.03	0.39	19,334
➢Motor vehicle power train components mfg.	336350	26,487	18,417	–8,070	89,509	75,769	–30.47	–15.35	97,154
Caterers	722320	17,909	10,285	–7,624	149,118	154,927	–42.57	3.90	12,448
➢Gasoline engine and engine parts mfg.	336312	19,463	12,120	–7,343	72,877	54,444	–37.73	–25.29	88,668
➢Motor vehicle seating and interior trim mfg.	336360	21,610	14,277	–7,333	61,486	60,496	–33.93	–1.61	55,648
Department stores, except discount	452111	26,467	19,205	–7,262	810,585	637,056	–27.44	–21.41	18,310
➢Other motor vehicle electric equipment mfg.	336322	12,822	6,543	–6,279	92,835	65,400	–48.97	–29.55	64,973
New single-family general contractors	236115	16,185	10,240	–5,945	506,708	562,213	–36.73	10.95	41,683
➢Light truck and utility vehicle manufacturing	336112	15,204	9,325	–5,879	74,365	59,675	–38.67	–19.75	84,056
➢Motor vehicle steering and suspension parts	336330	14,438	8,610	–5,828	47,660	38,242	–40.37	–19.76	70,091
Drinking places, alcoholic beverages	722410	24,261	18,900	–5,361	387,852	353,582	–22.10	–8.84	11,919
Industries with the greatest job increase in Michigan									
Temporary help services	561320	78,979	93,210	14,231	2,179,838	2,553,338	18.02	17.13	$25,283
Full-service restaurants	722110	121,641	133,847	12,206	3,981,716	4,536,152	10.03	13.92	13,427
❖General medical and surgical hospitals	622110	173,945	184,076	10,131	3,881,448	4,195,600	5.82	8.09	45,558
❖Offices of physicians, except mental health	621111	56,913	66,638	9,725	1,940,147	2,160,695	17.09	11.37	70,223
❖Elementary and secondary schools	611110	18,683	26,368	7,685	536,094	631,710	41.13	17.84	25,235
❖Home health care services	621610	22,297	28,821	6,524	675,660	915,024	29.26	35.43	28,269
Limited-service restaurants	722211	109,564	115,111	5,547	3,088,393	3,464,085	5.06	12.16	11,153
General freight trucking, long-distance TL	484121	7,839	12,372	4,533	509,069	544,596	57.83	6.98	40,033
Professional employer organizations	561330	53,733	57,503	3,770	789,778	687,243	7.02	–12.98	34,378
❖Other individual and family services	624190	8,579	12,044	3,465	285,830	346,736	40.39	21.31	26,199
Home centers	444110	18,605	21,964	3,359	539,666	668,001	18.05	23.78	26,982
Machine shops	332710	14,285	17,607	3,322	226,773	273,771	23.26	20.72	45,907
Family clothing stores	448140	11,717	14,701	2,984	434,504	538,056	25.47	23.83	12,491
Plastics material and resin manufacturing	325211	3,899	6,594	2,695	61,552	60,745	69.12	–1.31	86,934
❖Services for the elderly and disabled	624120	6,040	8,733	2,693	337,281	535,348	44.59	58.72	18,336

➢Transportation equipment manufacturing. ❖Private education and health services.

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Undisclosed data were estimated by Donald Grimes, University of Michigan.

Among the top fifteen declining industries, nine (60 percent) are associated directly with transportation equipment manufacturing (NAICS 336), flagged by the arrowhead symbol in the table. The average wage among these industries ranges from $56,000 to $97,000, compared with an average private-sector wage of $43,000. Among the remaining six industries on the list, some of the job losses are at least partly related to auto manufacturing, such those as in the managing offices category. The remaining industries are no surprise: housing construction and much of retail trade have been in decline in recent years.

Among the top fifteen increasing industries, six (40 percent) are found in the private education (NAICS 61) and health services (NAICS 62) supersector; these industries are flagged by the diamond-shaped symbol in the table. In addition, two manufacturing industries made the top fifteen: machine shops, and plastics material and resin manufacturing, both paying wages above the industrywide average for the private sector. General freight trucking made the list, as did some of retail. Temporary help has done well, but this could reflect as much a struggling economy as a future opportunity, depending on whether we end up doing business this way permanently. Restaurants are also on the list, in part because of tourism.

The data can be cut many different ways, of course, and one other may be worth considering here. From an economic development point of view, perhaps the most fruitful approach is to identify those industries that are both gaining jobs over the period and at the same time outperforming the nation because the nation's employment in the industry category either grows more slowly or declines. Among our 1,060 industries, a surprisingly large 298 private-sector nonfarm industries made the cut; some of the farm industries qualified as well. Table 4 includes thirty-one of these industries, all of which grew by more than 500 jobs in Michigan over the five-year period and outpaced their respective national counterparts.

Much more research on these industries is called for to assess their potential as drivers for the Michigan economy. Nonetheless, a few general observations can be made at this time. Manufacturing

Table 4

Select Growing Industries in Michigan That Outperformed Their U.S. Counterparts in Employment Growth, 2002–07*

Industry Name	NAICS	Michigan Employment			U.S. Employment		Employment Growth 2002–07 (%)		Average Wage Michigan
		2002	2007	Change 2002–07	2002	2007	Michigan	U.S.	2007
General freight trucking, long-distance TL	484121	7,839	12,372	4,533	509,069	544,596	57.83	6.98	$40,033
Machine shops	332710	14,285	17,607	3,322	226,773	273,771	23.26	20.72	45,907
Plastics material and resin manufacturing	325211	3,899	6,594	2,695	61,552	60,745	69.12	–1.31	86,934
Mortgage and nonmortgage loan brokers	522310	3,762	6,321	2,559	85,682	120,067	68.02	40.13	50,013
Other nonferrous foundries, exc. die-casting	331528	176	2,157	1,981	5,260	7,738	1125.73	47.11	55,291
Nuclear electric power generation	221113	1,197	3,091	1,894	45,457	52,968	158.25	16.52	96,039
Breakfast cereal manufacturing	311230	2,865	4,363	1,498	13,775	15,506	52.29	12.57	78,536
Dairy cattle and milk production	112120	2,296	3,690	1,394	68,294	82,482	60.71	20.77	25,017
Industrial design services	541420	631	1,942	1,311	8,582	13,328	207.77	55.30	81,454
Other specialized trucking, long-distance	484230	5,255	6,456	1,201	103,165	121,754	22.85	18.02	52,395
Plate work manufacturing	332313	2,124	3,256	1,132	47,392	50,658	53.30	6.89	44,782
Plastics and rubber industry machinery	333220	1,961	3,023	1,062	15,112	18,444	54.16	22.05	50,214
Search, detection, and navigation instruments	334511	1,661	2,676	1,015	147,140	155,671	61.11	5.80	82,266
Electronic shopping	454111	383	1,368	985	47,208	75,930	257.24	60.84	52,402
All other professional and technical services	541990	868	1,767	899	40,607	71,487	103.57	76.05	40,627
Medical equipment merchant wholesalers	423450	3,289	4,168	879	156,465	187,149	26.73	19.61	84,905
Printed circuit assembly manufacturing	334418	2,282	3,036	754	50,166	54,919	33.04	9.47	47,817
Museums	712110	1,234	1,973	739	69,010	74,944	59.89	8.60	25,809
Surgical and medical instrument manufacturing	339112	1,056	1,759	703	106,757	110,664	66.57	3.66	49,283
Commercial bakeries	311812	3,882	4,557	675	139,085	130,834	17.39	–5.93	28,315
Other services related to advertising	541890	1,098	1,756	658	58,642	68,628	59.93	17.03	29,757
Recyclable material merchant wholesalers	423930	3,705	4,357	652	94,965	111,255	17.60	17.15	51,863
Sawmill and woodworking machinery	333210	129	762	633	7,970	7,410	490.70	–7.03	38,939
Semiconductors and related device mfg.	334413	220	853	633	251,107	216,288	287.73	–13.87	43,334
All other legal services	541199	110	717	607	14,833	17,706	551.82	19.37	40,574
Fruit and vegetable merchant wholesalers	424480	1,267	1,870	603	71,723	79,866	47.59	11.35	49,359
Freight transportation arrangement	488510	4,602	5,186	584	166,905	185,171	12.69	10.94	46,642
Frozen fruit and vegetable manufacturing	311411	699	1,282	583	41,408	31,031	83.40	–25.06	29,520
Nonfolding sanitary food container mfg.	322215	445	1,008	563	15,410	14,166	126.47	–8.07	45,814
Analytical laboratory instrument mfg.	334516	658	1,216	558	34,453	33,219	84.80	–3.58	56,848
Berry, except strawberry, farming	111334	1,233	1,769	536	10,727	13,513	43.47	25.97	19,832

*Note: Industries in Michigan with employment increases under 500 or with a high content of local activity were excluded.

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Undisclosed data were estimated by Donald Grimes, University of Michigan.

outside of transportation equipment has some presence on the list, including the machine shops and plastics and resins that appeared in the previous table. Other manufacturing activities include search and detection instruments, printed circuit assembly, surgical and medical instruments, and semiconductors. Within trade, transportation, and utilities we find freight trucking, nuclear power generation, and wholesaling of medical equipment and recyclable material. The professional and scientific services sector contributes industrial design; for tourism, there are museums. And within the farm industries, dairy cattle and milk production are prominent.

So, are there activities here that we should promote? Many of the industries are small, but the list is long. Equally important, are there any job skills here in which we have a comparative advantage and that are transferrable to activities showing promise in the economy of the future? The answers are well beyond our charge in this study. What is within our scope is to see how these industry trends, at a more aggregate level, have carried forward during 2008, in order to determine the launching point for our forecast. We turn to this now.

C. The Michigan Economy in 2008

The same sectors that have had the major influence on the employment trends of the past five years, both negative and positive, have also had the major influence on employment movements during the first nine months of 2008, the point where our historical record currently ends. This is shown in Table 5, which reports an additional job loss of 31,000 workers from the fourth quarter of 2007 through the third quarter of 2008, according to preliminary data. Most of the declines are clustered in three familiar industry categories: transportation equipment manufacturing, down 20,000 jobs; construction, down 13,000 jobs; and trade, transportation, and utilities, down 6,000 jobs, of which 4,000 are in retail trade. So we note without surprise that the theme carries forward: a stressed domestic auto industry, a local housing market that appears not yet to have found bottom, and retail stores operating on thin margins.

Table 5
Recent Trends
Change in Employment, 2007q4–2008q3

	Employment Change (Thousands)	Average Wage 2007
Wage and salary	–31	$43,466
Transportation equipment manufacturing	–20	76,013
Construction	–13	48,958
Trade, transportation, and utilities	–6	36,880
Private education and health services	+9	39,647

Also as in the past five years, the one supersector providing meaningful employment growth is private education and health services, which added 9,000 jobs during the first nine months of 2008. With minor ups and downs over the period among the other major categories of the service sector, the job contribution from health services matches the gains among services as a whole.

The sectors in the Michigan labor market not shown in Table 5 posted a cumulative job loss of 1,000 workers over the period.

Unfortunately, the recession in the national economy and the tenuous position of the domestic automakers do not bode well for Michigan in the months that follow. Before we offer our perspective on the next few months, and years, we review the national and local input assumptions that influence our forecast for Michigan through 2010.

IV. Inputs to the Forecast

Our Michigan forecast depends on the overall health of the national economy, national economic policy, and a set of assumptions specific to the state. Major elements of our national forecast include the following:

- Over the past year, the Federal Reserve has lowered interest rates and provided extraordinary additional liquidity to shore up financial markets. From September 2007 to October 2008 the Fed reduced the federal funds target rate from 5.25 percent to 1 percent. Our forecast assumes the Fed will cut the target rate by another 50 basis points by the end of this year, hold the rate at 0.5 percent through early 2010, and then bring it back up to 2¼ percent by the end of that year.

- The 3-month T-bill rate hovers near 0.5 percent through early 2010 and then rises with the fed funds rate to 1.7 percent in 2010q4. The 30-year conventional mortgage rate, which averaged 6.2 percent in October, slips to 6 percent in mid-2009 and to 5.8 percent a year later.

- In the current circumstances, a significant sustained fiscal stimulus is likely to be more effective in spurring growth than further reductions in interest rates would be. Our forecast assumes a federal stimulus package will be in place by early 2009 that includes further income tax rebates, infrastructure spending, state aid, income support, and some assistance for the ailing auto industry.

- The U.S. economy has deteriorated in the wake of the credit market collapse this fall and is now clearly in recession. Real GDP, which declined at a 0.3 percent pace in the third quarter of 2008, falls at a 4.1 percent pace this quarter, and a 1.1 percent rate during the first half of 2009. Thawing credit markets, fiscal stimulus, and the bottoming of the housing slump contribute to a turnaround in the second half of next year and output increases at a 1.1 percent pace. The economy accelerates during 2010, with output rising at a 2.4 percent pace during the first half of the year and a 3.2 percent pace during the second half. Consumption picks up, homebuilding begins to recover, business capital spending turns around in the spring, and firms start rebuilding inventories.

- The national unemployment rate, currently 6.5 percent, peaks at 8.2 percent in early 2010 and then edges down to 8 percent by the close of that year. The jobless rate averages 7.8 percent in 2009 and 8.1 percent in 2010.

- The price of west Texas intermediate crude oil soared earlier this year, reaching highs of $140–$145 per barrel in July. Oil prices have now retreated substantially, averaging $77 per barrel in October and recently falling below $60. We have assumed the price of oil will settle a bit below $60 for most of 2009 before rising to $80 per barrel by the end of 2010.

- Core CPI inflation slips from 2.4 percent in 2008 to 2 percent in 2010. Sharply lower oil prices and moderating food price inflation reduce all-items CPI inflation to 1.3 percent in 2009, down from 4.2 percent this year. Moderate increases in oil prices bring headline inflation up to 2.6 percent in 2010.

- The downturn in housing continues well into next year. Home prices finally stabilize at the end of 2009. Housing starts pick up late in that year, and existing single-family home sales follow a quarter later. Housing starts, which total 965 thousand units this year, drop again to 836 thousand units in 2009 and then recover to about 940 thousand units in 2010.

- After totaling 16.1 million units in 2007, light vehicle sales have plunged this year. Hampered by a lack of financing opportunities, light vehicle sales in October hit their lowest level in 25 years. Sales of cars and light trucks total just 13.3 million units this year and drop to 12.2 million units in 2009. As the economy improves, light vehicle sales rebound to 13.6 million units in 2010.

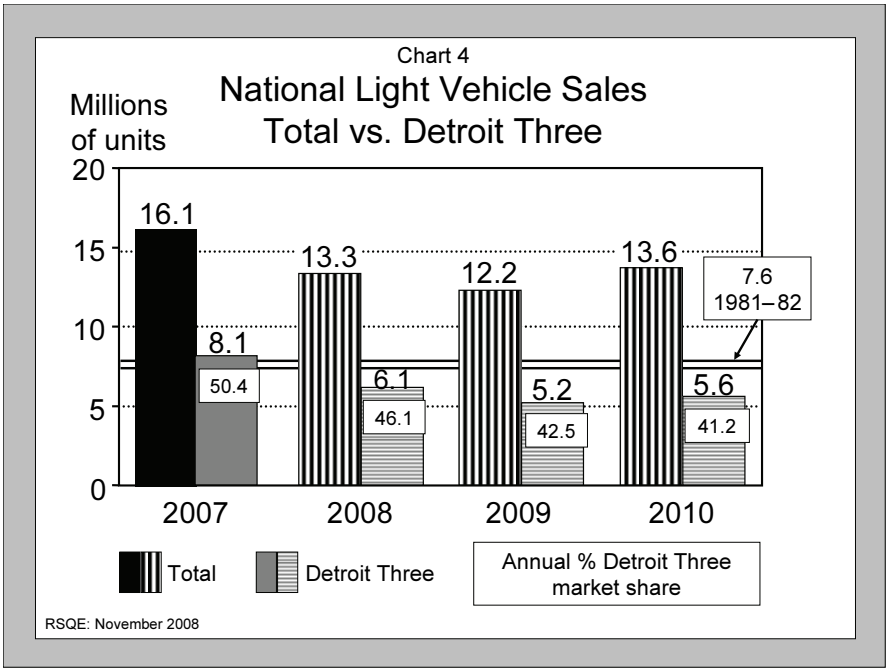
The outlook for Michigan is affected by some additional assumptions, the most important of which are related to the automotive industry. The key assumption on autos was highlighted in the introductory section: that some form of rescue package will be approved by the federal government, either very soon or early next year. The details of such a package are unknown at this time, of course, and could affect the forecast in ways that we have not anticipated. Much more should be known soon, but our forecast is of necessity predicated on what is known to date.

The liquidity crisis in the auto industry notwithstanding, the current contract between the United Auto Workers and the Detroit Three automakers is in effect to September 2011. The pay provisions of the agreement call for lump-sum performance bonuses per qualified worker of 4 percent and 3 percent in the next two Septembers, respectively (2009 and 2010). There is no increase in base pay over the length of the contract. We have incorporated these pay provisions into our forecast for Michigan. We recognize, though, that pay could become an issue in the details of the rescue package.

The agreement also allows for a two-tier wage structure, where certain new workers can be paid a wage that is about half the rate paid to core workers. Since hiring has been at a minimum recently, comparatively few of these workers are in the system now, and we assume that this provision will have a relatively small effect on wages over the forecast period.

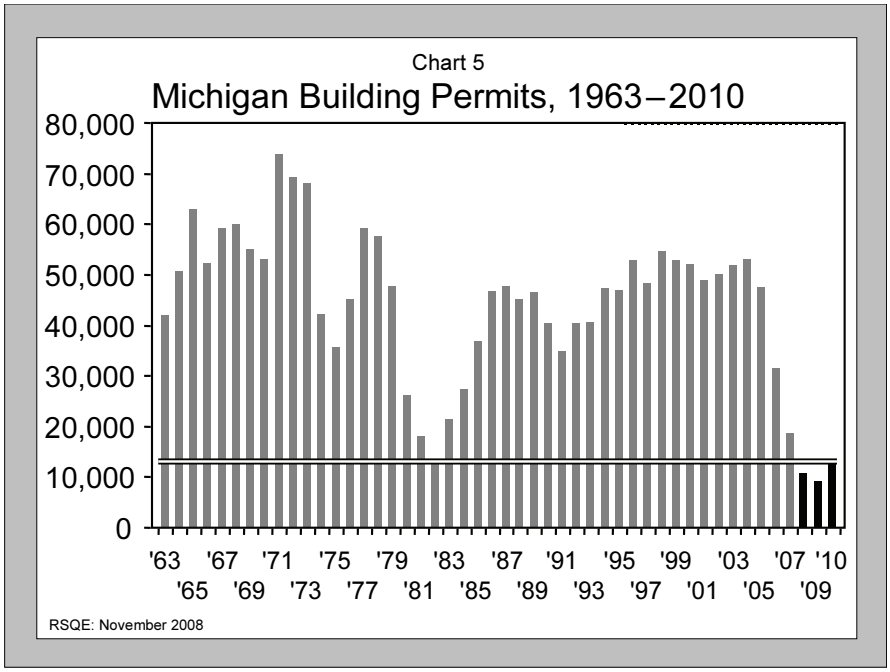
Based on the profit profile for the domestic market, we do not expect any of the Detroit Three automakers to make a profit-sharing payout in the next two years.

A large number of automotive plant idlings are expected in the next few months in response to the very low sales levels. Several plant closings are also anticipated, particularly over the course of the next year. In addition, all of the Detroit Three intend to reduce their white-collar work force fairly quickly, including, by our estimate, over 5,000 at GM and Ford in Michigan by early next year (these workers are included in professional and business services in our data). We are assuming that Chrysler will continue to operate while looking for a buyer.



Factoring in a difficult final quarter of 2008 to what we already know about the rest of the year, we see a sharp drop of 2.8 million units in total sales of light vehicles produced in North America, from 16.1 million units to 13.3 million, for calendar-year 2008. Combined with our estimate of a further drop of 4.3 percentage points in the Detroit Three's share of that market, this implies a sales level for the Detroit Three of 6.1 million units for 2008, a decline of 2 million units from 2007, as shown in Chart 4. In 2009, Detroit Three sales fall by another 900,000 units, to 5.2 million, as both the total market and the Detroit Three's market share decline further. This is followed by a modest turn in the Detroit Three sales path for 2010, with a gain of 400,000 units from the sales level forecast for 2009, supported by an expected turnaround in the total light vehicle market and a smaller drop in market share. Observe, though, that for all three years from 2008 to 2010, the Detroit Three sales levels fall below those recorded in 1981 and 1982, which are the lowest levels recorded since at least 1979.

Technically, building permits are predicted within the internal workings of the state econometric model, and thus are not strictly an input assumption. They are an input to our employment forecast, though, and we include them for convenience in our discussion here. The current slump in local homebuilding persists through next year before a modest turnaround in 2010, as represented by the forecast for residential building permits shown in Chart 5. As with Detroit Three vehicle sales, residential building permits are expected to linger at historic lows for much of the forecast period.

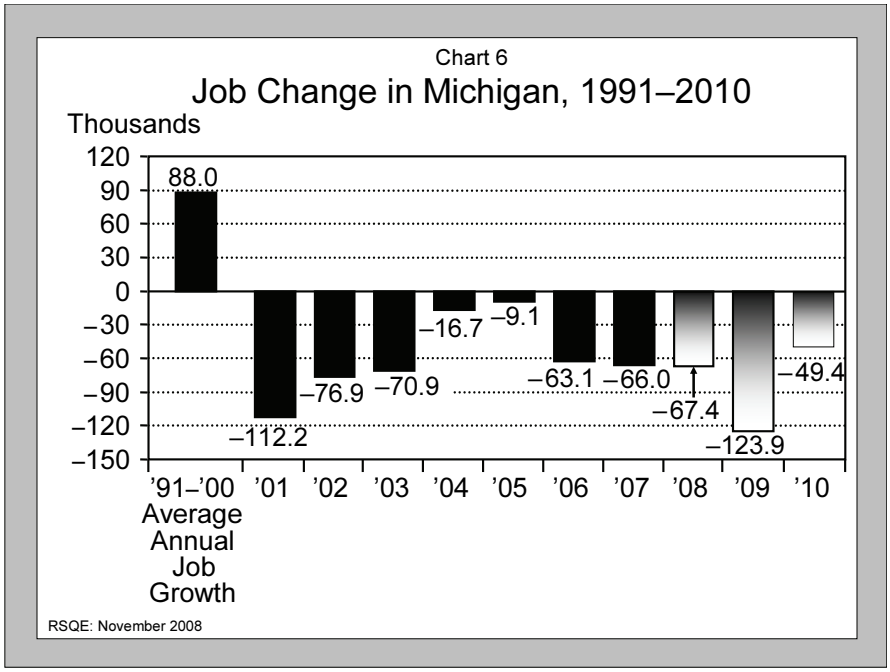


Permit levels for both 2008 and 2009 fall short of the 1982 level, the lowest point since at least 1963, then rise just to the 1982 level in 2010.

We have incorporated into the forecast our assumption of the temporary government hires required to assist in the 23rd decennial Census of Population in 2010. These temporary workers will be employed in Michigan largely for enumeration and data processing tasks during 2010, with peak hiring expected in the spring quarter of that year.

V. The Forecast for 2009–2010

Based on the information presented up to now, it's hard to imagine a shakier launching point for our forecast. The Michigan economy is characterized at present by broad-based weakness; the national economy is in recession and looking ahead in 2009 to its most sluggish performance since 1982; Detroit Three light vehicle sales are expected to fall short of lows established in the early 1980s; and residential building permits are forecast to settle into low-point territory as well. This is just too many strikes against the state economy for it to head in any direction but down, and that's indeed the course our forecast takes. We do see some improvement in the employment situation in 2010, but not enough to reverse the string of down years that was set in motion in 2001.



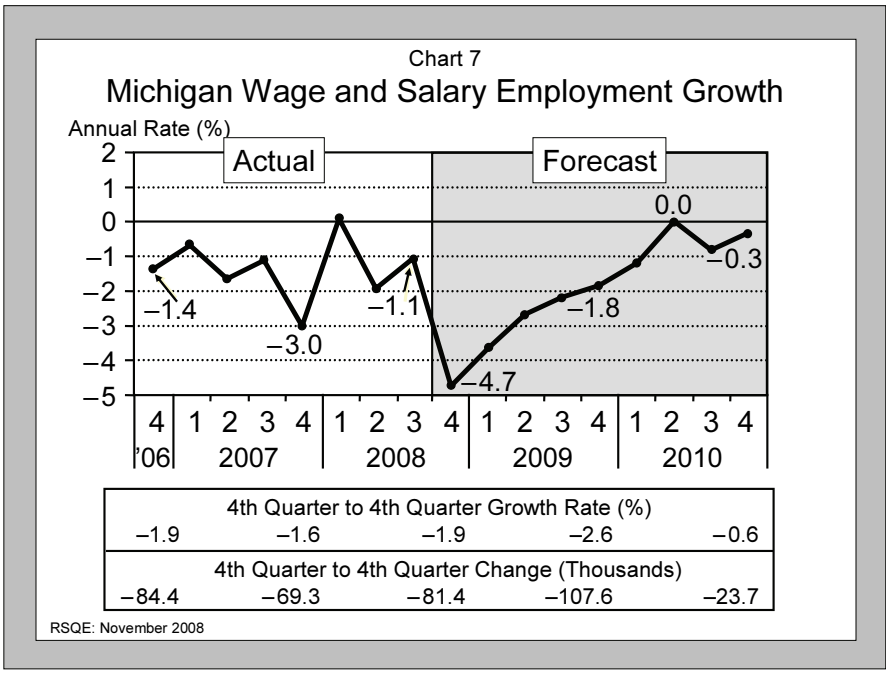
The annual change in Michigan wage and salary employment is shown in Chart 6. The chart reports the average annual job gain from 1991 to 2000, the calendar-year job changes recorded from 2001 to 2007, and our forecast of yearly job changes from 2008 to 2010.

Michigan's labor market performance between 1991 and 2007 can be segmented into three time intervals. The first is what might be termed the golden years of the 1990s, when 88,000 jobs *per year* were added—a performance that most of us are unlikely to see again in our lifetime. This era was followed by the downturn from 2001 to 2005, when the economy was hit hard but was systematically moving its way back, coming very close to positive job growth territory in 2005. Third came the U-turn in 2006 and 2007, as the Detroit Three opted for an extreme makeover and the national housing slump piled on. Annual job losses in the past two years averaged 65,000 workers, and we find ourselves in the same neighborhood this year; with one quarter of data to come, we anticipate that Michigan will post a job loss of 67,400 workers for calendar-year 2008.

With the downturn in the U.S. economy forecast for 2009—a one percent decline in real GDP on a calendar-year basis and the highest national unemployment rate since 1983—and with Detroit Three vehicle sales and state homebuilding activity pegged at rock-bottom levels, the Michigan economy is positioned for a heavy blow next year. We are forecasting a loss of nearly 124,000 jobs for 2009, most similar recently to what transpired in 2001. With the improvements foreseen in the U.S. economy and the auto and homebuilding markets, Michigan's slide decelerates in 2010, but we still see job losses of

almost 50,000 for that year. An extrapolation of our forecast suggests that we may see modest job gains in 2011.

The genesis of employment movements in Michigan is more easily seen in Chart 7, which shows our projected path for payroll employment through 2010 measured in quarterly time intervals. The box at the bottom of the chart translates the growth path into changes in employment *during* each year—that is, the change from the end of one year to the end of the next year—shown both as a percentage and in thousands of jobs.



A labor dispute at American Axle & Manufacturing over proposed reductions in wages and benefits triggered a number of temporary plant shutdowns in the second quarter of 2008. By June, the strike-related layoffs had ended, and this along with a smaller decline in construction following a very weak second quarter accounts for much of the improvement in the third quarter—an annual rate of job loss of 1.1 percent compared with a decline of 1.9 percent in the prior quarter. The departure of white-collar workers at Ford muted this improvement, though. According to our forecast, we will not see another period as good as the third quarter of 2008 until the spring of 2010.

Indeed, the economy is already forecast to ratchet down in the current quarter, with employment falling at an annual rate of 4.7 percent. The freeze-up in the credit markets, a sinking economy, and deteriorating consumer confidence contributed to a plummet in total light vehicle sales in October, to an

annual rate of 10.5 million units. We anticipate that the rate over the months of the fourth quarter will average 11 million units. The Detroit Three are planning to idle plants in the next few months in response to the drop in sales, and they plan to lay off workers over the next several months. The impact on suppliers will be significant as well. White-collar workers in the auto industry are on a faster track for departure; we estimate that over 5,000 of these workers at GM and Ford in Michigan will leave in the next few months, with more to come from Chrysler as well.

The story of the waning local economy at the close of 2008 starts with the perils of the auto industry, but it does not end there. Local government took a significant hit at the beginning of this school year due to its ongoing budget problems, construction continues to suffer from the weak housing market, and retail trade can't shake its funk.

Many of these problems persist during 2009, particularly those related to the auto, construction, and retail industries. Both Detroit Three sales and Michigan residential building permits are expected to sink to levels below the lows of the early 1980s. It will be a rough year, particularly the first half of it; if there is a silver lining to our forecast for 2009, it is that we see the situation improving over the year. We are forecasting that employment will decline at an annual rate of 3.2 percent during the first half of 2009, but that it will decelerate to a 2 percent rate during the second half of the year. But the improvement is slow, like the recovery in the U.S. economy.

We expect that 2010, although not an especially good year, will nevertheless be a much better year, with employment declining at a more modest rate of 0.6 percent during the year, and closing the year with a relatively small job loss amounting to 0.3 percent. This progress runs in line with a significantly strengthening U.S. economy, an auto sector that is still weak but is resuscitating, and some pickup in local homebuilding by mid-year. The spike in job growth in the spring of 2010 reflects the hiring of temporary workers for the Census.

The employment growth path cumulates to job losses of 81,400 during 2008; the losses worsen to 107,600 during 2009, but then dwindle to 23,700 during 2010, as shown in the box at the bottom of the chart. If our forecast proves accurate, the net employment loss from the peak job count in mid-2000 to the end of 2010—an interval that spans more than a decade—would be 674,000 jobs. This represents a decline of 14.4 percent, only a tad better than the 14.6 percent job loss suffered during the recession of 1979–82.

The path for total payroll employment traced out in Chart 7 can be better understood by considering the underlying job movements of the major sectors that make up this work force. Such a breakout is provided in Table 6, which shows the job changes during 2007 and the forecast years 2008 through 2010.

Table 6
Michigan Employment Changes
(Thousands of jobs)

	2006q4 to 2007q4	2007q4 to 2008q4	2008q4 to 2009q4	2009q4 to 2010q4
Total nonfarm	**–69**	**–81**	**–108**	**–24**
Natural resources and mining	0	0	0	0
Construction	–9	–17	–18	0
Manufacturing	–36	–38	–53	–24
Transportation equipment manufacturing	–19	–31	–34	–15
Other manufacturing	–17	–7	–19	–9
Trade, transportation, and utilities	–7	–13	–14	–5
Information	0	–2	–1	–1
Financial activities	–5	–5	–3	1
Services	–2	4	–9	12
Professional and business services	–13	–7	–19	1
Private education and health services	12	12	11	11
Leisure and hospitality	–1	1	–1	0
Other services	0	–2	0	0
Government	–9	–9	–8	–7

The major contributors to work force movements in the Michigan economy, numbering about a half dozen, are what would be expected from the foregoing discussion of Chart 7. Construction was one of the big job losers this year, and will continue to be next year, shedding about 18,000 jobs each year. Construction employment hits bottom in the spring of 2010 and grows slowly for the rest of the year as the local housing market begins its recovery, netting out to zero job growth during 2010. Manufacturing has been hit about as hard this year as it was last year, down approximately 37,000 jobs in both 2007 and 2008, and next year auto restructuring gets even more serious, resulting in a loss of 53,000 manufacturing workers. Again, 2010 looks much better, but still not good, with job losses shrinking to 24,000 manufacturing workers. Nearly two-thirds of the manufacturing job losses during the next two years occur in the transportation equipment industry, which by the end of 2010 employs less than a third of the workers it had in its work force in mid-2000.

The trade, transportation, and utilities sector contains some auto-related activity, but five out of eight jobs in this sector are in retail trade. The job losses in this sector are expected to be about the same next year as they were this year, about 14,000 down in each year, before backing off to a loss of 5,000 jobs in 2010 as the local economic environment improves. The story for the service sector is in two of its subsectors. Professional and business services takes heavier losses next year, many of them auto-related, and a number of the affected workers are employed directly by the auto companies. The private education and health services category continues to be the main, sometimes sole, job provider among the major sectors (recall, though, that there are many smaller industries that are growing outside of this sector). We see this ever-robust industry category consistently adding between 11,000 and 12,000 jobs per year to the Michigan economy through 2010.

As the health care sector consistently adds jobs each year, we see the government sector consistently subtracting jobs, to the tune of about 8,000 per year. Much of this loss is predicted to occur in the local government component, as budget shortfalls are becoming a permanent part of the public-sector landscape.

Detroit Three Sales and Michigan Employment: A Counterfactual Experiment

The critical role of the auto manufacturing sector in the Michigan economy is well known; it is the inevitably recurring theme of this presentation. We were curious about how much better the Michigan economy might look if the auto sector were in better health, so we ran a simple experiment, changing only two inputs: total light vehicle sales and Detroit Three market share, which in turn determine Detroit Three sales. Detroit Three sales are in the low- to mid-5-million-unit range in our forecast; we set these sales at 8 million units throughout the two-year horizon, by holding total light vehicle sales steady at 16 million units and Detroit Three market share constant at 50 percent—similar to their position in 2007. We stress that this was more an academic exercise than a fully articulated simulation experiment, but the results are interesting nonetheless; they are shown in Table 7. At the end of the two-year period, which is the fourth quarter of 2010, total nonfarm employment is higher by 133,000 jobs in response to the change in vehicle sales—a change that offsets the entire nonfarm job loss shown in our baseline forecast over the same two-year interval! About half of these jobs are in manufacturing, and another quarter are in two sectors combined: professional and business services, and trade, transportation, and utilities. This simple experiment serves to emphasize the magnitude of what we already know: for better or for worse, auto manufacturing has a formidable influence on the Michigan economy.

Table 7
Effect on the Michigan Economy of Holding Detroit Three Sales Steady: A Counterfactual Experiment*
2008q4–2010q4

	Employment Effect (Thousands)			
	Total Nonfarm	Manufacturing	Professional/ Business Services	Trade, Transportation, Utilities
2010q4	133.1	62.8	18.4	16.7

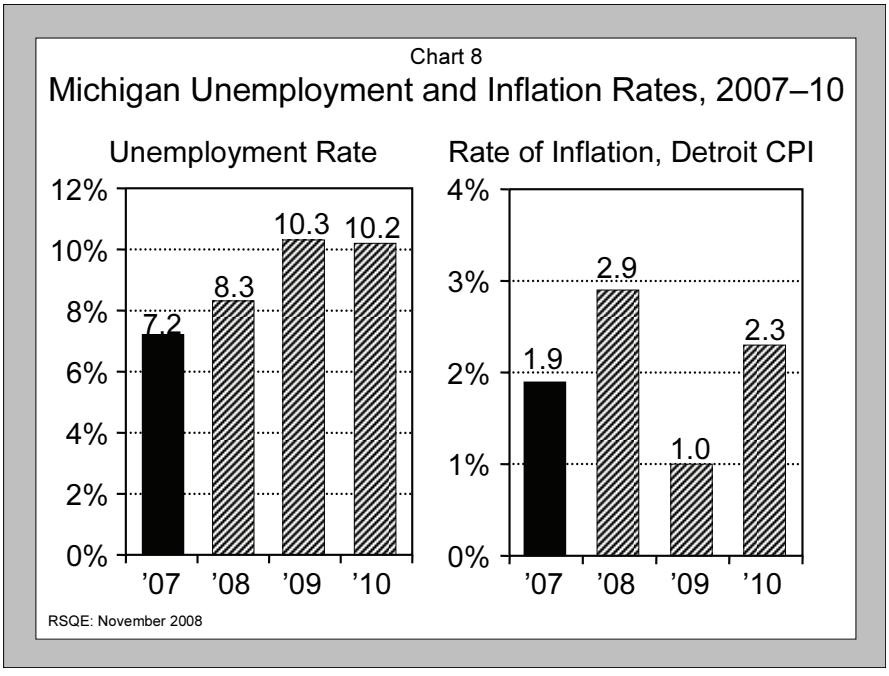
*Total light vehicle sales held steady at 16 million units, Detroit Three market share at 50 percent.

RSQE: November 2008

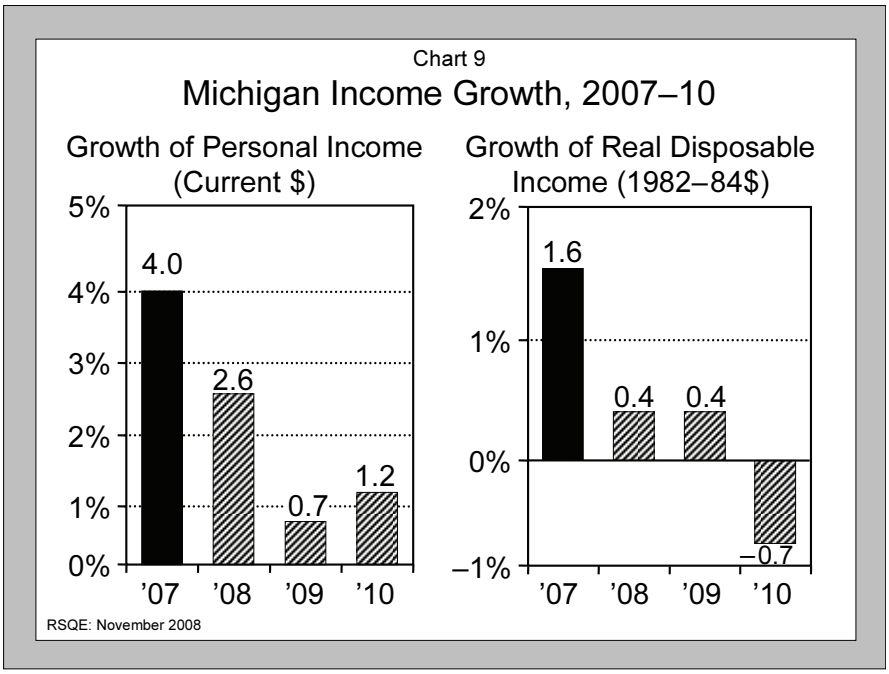
We now leave the experimental scenario and return to our discussion of the baseline forecast.

The Michigan unemployment rate has ranged from 8.5 percent to 8.9 percent since May of this year, and posted a reading of 8.7 percent for September as well as for the third quarter as a whole. With the significant labor market weakness we forecast for the closing quarter of this year, the unemployment rate jumps up to average 9.5 percent. The extensive job loss projected during 2009 suggests a rising unemployment rate, and that is indeed what we are forecasting. The rate moves up another full percentage point, from 9.5 percent at the close of 2008 to 10.5 percent at yearend 2009. With a better year anticipated for 2010, the jobless rate drifts down from its peak of 10.5 percent reached at the end of 2009 to 10 percent in the final months of 2010. These rates would have been higher still if it were not for a labor force that continues to decline throughout the next two years. As shown in the first panel of Chart 8, these movements translate into calendar-year averages of 8.3 percent for 2008, 10.3 percent for 2009, and 10.2 percent for 2010. The unemployment rates for 2009 and 2010 would be the highest recorded for a calendar year since 1984.

Our forecast of local inflation, measured by the growth rate of the Detroit CPI, is shown in the second panel of Chart 8. Accelerating food and energy prices pushed local consumer prices up by 2.9 percent this year, a full percentage point higher than last year's rate of 1.9 percent. With oil prices cut nearly in half for 2009, local inflation slows considerably for that year, to just one percent. Local inflation rebounds to 2.3 percent in 2010, reflecting in part a moderate increase in oil prices. The Michigan inflation



rate, in a weaker economic environment, is forecast to be 3/10 of a percentage point lower than the U.S. rate in 2009 and 2010.



The income side of the forecast is summarized in the two panels of Chart 9. Personal income growth decreased from 4 percent for 2007 to 2.6 percent in 2008. A slightly larger decline in employment and weaker growth in both average earnings per worker and property income (dividends, interest, and rent) contributed to the slowdown. As job losses accelerate and property income shrinks, personal income growth slows further in 2009, to just 0.7 percent. It then drifts up to a still-weak 1.2 percent for 2010, reflecting a somewhat stronger labor market but muted by accelerating declines in property income.

The second panel of Chart 9 shows the growth of real disposable income, that is, personal income adjusted for taxes and inflation. Real disposable income gets a boost this year from the federal tax rebate, but this is countered by much higher inflation, much lower nominal personal income growth, and an increase in the state personal income tax rate. The net result is a 0.4 percent increase in real disposable income for 2008, significantly below the 1.6 percent rate posted for 2007. The growth of purchasing power holds at a 0.4 percent rate for 2009, as lower inflation is countered by a further weakening in nominal income growth. For 2010 the reverse holds: somewhat stronger nominal income growth but inflation substantially higher than the abnormally low levels we expect for 2009, yielding a 0.7 percent decline in the growth of real disposable income.

Our income forecast has implications for the state revenue outlook, to which we now turn.

VI. The State Revenue Outlook

Although economic conditions were deteriorating as fiscal 2008 drew to a close, preliminary figures indicate that revenues for the state's general fund and school aid fund came in stronger for that year than had been expected when revenue targets were adjusted in Lansing last May. The economic outlook for fiscal 2009 has turned much bleaker since then. The governor has indicated the need for spending cuts to bring the budget back in line with lower anticipated revenues. We have reduced our fiscal '09 revenue forecast relative to both May and August.

Revenue projections for the next two years depend on a number of previously enacted tax changes as well as the underlying performance of the economy. The legislation affects revenues from the personal income tax, the state's main business tax, and the tax on casino revenue.

Legislation from 2007 included a temporary increase in the state personal income tax rate. Prior to October 1, 2007, the tax rate was 3.9 percent. From October 1, 2007 through September 30, 2011, the tax rate is set at 4.35 percent. Rate reductions are scheduled to follow annually until the rate returns to 3.9 percent in 2015. Although revenue from the income tax is split between the general fund and the school aid fund (SAF), all of the revenue from the rate increase has been designated for the general fund.

Also affecting the state personal income tax is the implementation of a state earned income tax credit (EITC). Effective with the 2008 tax year, taxpayers who are eligible to claim the federal EITC can claim a credit on their Michigan income tax as well. The state credit is equal to 10 percent of the federal EITC for 2008 and 20 percent in subsequent years. It is expected that taxpayers will claim the credit when filing their annual returns, so the credit will first affect state revenues in fiscal 2009. It is estimated that the state EITC will total nearly $140 million in fiscal 2009 and about $310 million in fiscal 2010 when the credit doubles.

A second piece of major tax legislation replaced the single business tax (SBT) with the Michigan business tax (MBT). The MBT incorporates both a business income tax and a modified gross receipts tax. Part of the new business tax package provides firms some relief from personal property taxes at both the state and local levels. To protect K-12 funding from the resulting revenue loss, a portion of the MBT has been designated for the school aid fund to offset revenue reductions from the state education property tax, the industrial facilities tax, and local school taxes.

Initially the MBT was designed to be revenue neutral, with receipts from the tax, after a transition year, offsetting both the lost K-12 funding and the revenue that would have been generated by the SBT. Late last year, however, a surcharge on the MBT was enacted to replace an unpopular use tax on services. Earlier this year, the state enacted tax credits to attract film production activity to Michigan, and the federal government included accelerated depreciation provisions in its fiscal stimulus package, reducing business taxable income. Both of these provisions will reduce MBT revenue over our forecast horizon.

Most businesses have made their last payment under the SBT this year and are now making quarterly payments under the MBT. The MBT legislation earmarked $341 million in fiscal ’08 and $729 million in fiscal ‘09 for the SAF, with the balance of the MBT revenue designated for the general fund. For the years following fiscal 2009, the MBT revenue earmarked for the SAF is to be indexed by the fiscal year increase in the U.S. CPI. Our national inflation forecast implies an earmark of $741 million to the SAF in fiscal 2010.

The third revenue source to reflect tax changes is the casino tax. When the casino tax rate was increased in 2004, the tax accruing to the state rose from an 8.1 percent rate (dedicated to the SAF) to 12.1 percent, with most of the revenue from the additional 4 percentage points going to the general fund. The legislation provided that the state rate would revert to 8.1 percent for each of the Detroit casinos as it began operating its permanent facility. MGM Grand Detroit and MotorCity started paying the lower rate in fiscal ‘08, and Greektown is planning to join them later in fiscal 2009.

Our forecast of state revenues for fiscal years 2009 and 2010 is presented in Table 8. The upper portion details general fund general purpose (GFGP) revenues, and the lower portion presents school aid fund revenues. Gross income tax collections—the sum of withholding, estimated payments, and final settlements net of refunds—increased by 12 percent in fiscal 2008, largely due to the hike in the tax rate. This translates into an increase in GFGP income tax revenue of 16.8 percent, since all of the revenue generated by the rate increase goes to the general fund. With the recent plunge in equity markets, the deteriorating Michigan economy, and the phase-in of the EITC, GFGP income tax revenue is projected to decline by 5.6 percent in fiscal 2009 and by 6.7 percent in fiscal ’10. The phase-in of the earned income credit accounts for about half of the decline in each of the fiscal years.

After two years of very weak sales and use tax collections, combined revenues for these two taxes increased by 2.7 percent this year, supported in part by the federal fiscal stimulus and by a large one-time audit-related use tax payment. (See the bottom of Table 8.) We expect the improvement to be short-lived. Combined sales and use tax revenues are forecast to drop by 3.2 percent this year as households tighten their belts another notch. Sales and use tax collections then improve but remain very weak in fiscal ’10, increasing by a meager 0.2 percent. GFGP consumption tax revenues, which include portions of sales and use tax collections as well as excise taxes on cigarettes and alcohol, drop by nearly 5 percent in fiscal 2009 and edge down by 0.5 percent in 2010.

For businesses, 2008 was the year of transition from the SBT to the MBT. Business tax revenues rose by 16.2 percent. SBT revenue dropped to about a third of fiscal ’07 collections, but the MBT, including the surcharge, generated more than $1.5 billion for the general fund. In fiscal 2009, the SBT–MBT transition is complete, a larger portion of the MBT is earmarked for the SAF, and business tax cuts at both the federal and state levels are in place. GFGP business tax revenues are forecast to fall by 14.1 percent in fiscal ’09. In fiscal 2010, business taxes rise by 5.2 percent. Total MBT revenue (GFGP plus SAF) is projected to increase by 4.7 percent, but with a low inflation factor projected for the SAF earmarking formula that year, the increase in GFGP MBT revenue is 5.9 percent.

Table 8
State Revenues by Fiscal Year
(Millions of dollars, except as noted)

	Actual		RSQE Forecast	
	2007	2008[P]	2009	2010
General Fund General Purpose				
Income tax	4331	5056	4773	4454
(% change)	(3.5)	(16.8)	(−5.6)	(−6.7)
Consumption taxes	1316	1316	1253	1246
(% change)	(−0.1)	(−0.1)	(−4.8)	(−0.5)
Sales	83	96	72	89
Use	920	918	885	866
Other consumption	313	301	296	291
Business taxes	2158	2507	2152	2265
(% change)	(−1.4)	(16.2)	(−14.1)	(5.2)
Single business	1816	641	0	0
Michigan business	0	1525	1841	1950
Other business	342	341	311	315
Other GFGP taxes	140	119	113	111
(% change)	(10.6)	(−15.0)	(−5.4)	(−1.2)
GFGP tax revenue	7945	8997	8291	8076
(% change)	(1.6)	(13.2)	(−7.8)	(−2.6)
Nontax revenue	374	364	342	326
GFGP revenue	8318	9362	8633	8402
(% change)	(0.6)	(12.5)	(−7.8)	(−2.7)
School Aid Fund				
SAF taxes	10404	10718	10788	10702
(% change)	(0.1)	(3.0)	(0.7)	(−0.8)
Lottery transfer	749	737	745	737
(% change)	(8.9)	(−1.6)	(1.1)	(−1.1)
Earmarked state SAF revenue	11153	11455	11533	11439
(% change)	(0.6)	(2.7)	(0.7)	(−0.8)
Addendum				
Gross sales and use taxes	7933	8148	7889	7905
(% change)	(−1.0)	(2.7)	(−3.2)	(0.2)

[P]Preliminary
RSQE: November 2008

Fueled by a number of tax increases, GFGP revenue surged by 12.5 percent, to $9.36 billion, in fiscal 2008, based on preliminary estimates. GFGP revenue declines by 7.8 percent in fiscal 2009, however, reflecting the full transition to the new MBT, the latest round of tax cuts, and the struggling economy. GFGP revenue drops by another 2.7 percent the following year, leaving the fiscal 2010 total, at $8.40 billion, only one percent above the fiscal 2007 level.

Our forecast of school aid fund revenue is presented in the bottom portion of Table 8. Despite continued weakness in the housing sector and declining property values in many areas, SAF revenue rose by 2.7 percent in fiscal '08, reflecting stronger sales tax revenue and the addition of the new MBT revenue. SAF revenue increases by only 0.7 percent in fiscal '09 and then backslides the following year, leaving fiscal '10 SAF revenue at its fiscal '08 level.

VII. Conclusion

A. Summary of the Outlook

We opened this presentation by alluding to the ancient Chinese curse, "May you live in interesting times." For the residents of Michigan, it's hard to imagine how they could live in more "interesting" times than they do now, but conceivably they could. As it now stands, the confluence of recession in the U.S. economy and the tenuous position of the domestic nameplate automakers is a troublesome gateway to the year ahead. We do fully expect, though, that at least by early next year, some form of rescue package will be approved by the federal government—whatever their reservations, and however the debate is concluded, it is very unlikely that Washington will simply turn its back on Detroit.

We expect that the U.S. economy will turn around in the second half of 2009, but even then, the Michigan economy is in for a rough ride, coming off a 2008 that is on target to post losses in the neighborhood of 67,000 jobs for the calendar year, virtually a repeat of 2006 and 2007. The weakness in the U.S. economy, combined with Detroit Three vehicle sales and state homebuilding activity at levels below the historic lows of the early 1980s, present a daunting challenge. We are forecasting a

loss of nearly 124,000 jobs in Michigan for calendar-year 2009, exceeding the declines for any year since 2001. The U.S. economy and the auto and housing markets show some pickup in 2010, and the Michigan job market responds, with losses shrinking to 49,000 jobs then—a much better year, but still not a very good one. The hard times in Michigan are here to stay for awhile.

From mid-2000, when our job levels last peaked, to the end of 2010, Michigan employment will be lighter by 674,000 jobs should our forecast prove accurate—a 14.4 percent decline that is a tad short of the 14.6 percent drop endured during the 1979–82 recession. More startling, our auto manufacturing job count at the end of 2010 will be just a third of what it was only a decade earlier. Sobering statistics indeed for these "interesting" times.

The unemployment rate averaged 8.7 percent for the summer quarter of this year and is headed upward in this challenging economic environment. We expect the jobless rate to peak at 10.5 percent in the final months of 2009, before drifting down a little to 10 percent at the end of 2010. Although it seems a long way off at the moment, an extrapolation of our forecast points to 2011 as a much more promising year for the Michigan economy—putting a bit more positive spin on "interesting" times.

B. Risks to the Forecast

Certain outcomes could diverge from our expectations and affect the accuracy of the forecast. These potential alternative outcomes are risks to the forecast. The most significant risk factors associated with the state forecast are those related to the national outlook and those that pertain to the auto and housing sectors. As with the national forecast, in the current environment the risks to the state outlook are both large and tilted to the downside—that is, the forecast is more likely to be too optimistic than to be overly pessimistic.

Risks associated with the national outlook. Many of the major inputs to the Michigan forecast originate from the national outlook. It follows that the risks highlighted in the current U.S. outlook are also matters of concern in the state forecast.

The overriding risk identified in the current U.S. outlook is that credit markets could remain stubbornly frozen and the financial crisis could get much worse. The resulting consequences could be amplified in Michigan with its concentration of markets for the sale of consumer durable goods, particularly those related to vehicles. Indeed, the onset of the credit crisis was an important factor in the recent plummet in vehicle sales, in turn accelerating and amplifying the current distress in the industry. And in an economy as fragile as Michigan's is currently, delays in the implementation of a significant fiscal stimulus package could be an even bigger setback for the state than for the country as a whole.

Risks associated with the auto sector. This risk, of course, is Michigan's 800-lb. gorilla. The first order of business is securing the rescue package. Although we are confident that this will happen, there are few certainties when operating in the political environment. Even if successful, it is unclear what conditions will be attached to the package, and how those conditions will affect company operations. What is certain, though, is that there will be strings attached. If the financing is squared away, there is still the question of what actions the companies will take to align their fixed costs to operate in a lower sales environment over the next few years, and how successful they'll be. No other industry has anywhere near as large an influence on the Michigan economy, and at no time in its history has there been greater uncertainty over its prospects. This is an evolving situation that calls for close monitoring.

Risks associated with the housing sector. We are forecasting that Michigan's housing sector will be weaker than the nation's and slower to see significant recovery. An even softer housing market than we are currently forecasting would deepen the downturn and slow recovery further.

C. Closing Thoughts

This is a downbeat forecast with a nontrivial downside risk; it's difficult to cast it in any more favorable light. That said, our analysis of recent history did uncover quite a number of small growing

industries in Michigan below the surface of the struggling macroeconomy. Whether there is anything in their DNA that can be engineered into the statewide economy is an open question, but that we need to be exploring options other than the manufacture of automobiles is a dead certainty. We've known this since the 1950s, but the urgency is now ratcheting up.

A discouraging trend is the loss of hope among increasing numbers of our residents. While understandable, it does blunt our resolve to move forward. But we should take heart—and hope—from the words of a twenty-first-century philosopher who said, "Yes, we can!" and resolve to make real change happen in Michigan.

Constant Adjustments in the RSQE Control Forecast for 2009–2010

The following adjustments have been used to correct for level drift and start-up error:

A.AEQGM	Average Earnings per Quarter, Government
A.AEQPM	Average Earnings per Quarter, Private
A.AFDC	Caseload for Family Independence Program
A.BLDPER	Residential Building Permits
A.ECCM	Employment, Construction
A.EFINM	Employment, Financial Activities
A.EINFM	Employment, Information
A.EMFOM	Employment, Manufacturing other than Transportation Equipment
A.EMIM	Employment, Natural Resources and Mining
A.EMRESM	Difference between Household and Payroll Survey Employment
A.EMTEQM	Employment, Transportation Equipment Manufacturing
A.ESBM	Employment, Professional and Business Services
A.ESHM	Employment, Education and Health Services
A.ESLM	Employment, Leisure and Hospitality
A.ESOM	Employment, Other Services
A.ETTUM	Employment; Trade, Transportation, and Utilities
A.HOUSEM	Existing Single-Family Home Sales
A.HRSM	Average Weekly Hours, Manufacturing
A.LFM	Labor Force
A.PAAAGA	Retail Price of Gasoline
A.PCPID	Detroit Consumer Price Index
A.PDIESE	Price of Diesel Fuel
A.PSTKNR	Current Cost Price Index, U.S. Nonresidential Capital Stock
A.SEVNR	State Equalized Value for Real Nonresidential Property
A.SEVR	State Equalized Value for Real Residential Property
A.STKNR0	Real U.S. Nonresidential Capital Stock
A.TBWMNS	Beer and Wine Tax Revenues
A.TCIGMN	Cigarette and Tobacco Tax Revenues
A.TCTF	Comprehensive Transportation Fund Revenues
A.TDIESE	Diesel Fuel Tax Revenues
A.TGASMN	Gasoline Tax Revenues
A.TLIQMN	Liquor Specific Tax Revenues
A.TRET	Real Estate Transfer Tax Revenues
A.TRSNVM	Sales Tax Revenues, Other
A.TRSVM9	Sales Tax Revenues, Auto
A.TSBQAM	Single Business Tax, Quarterly and Annual Payments
A.TSBRMN	Single Business Tax, Refunds
A.TSEP	State Education Property Tax Revenues
A.TSIM	Personal Contributions for Social Insurance
A.TUPMNS	Utility Property Tax Revenues
A.TUSEMN	Use Tax Revenues
A.TVEHRE	Vehicle Registration Tax Revenues
A.TYAMNS	Michigan Personal Income Tax, Annual Payments
A.TYQMNS	Michigan Personal Income Tax, Quarterly Payments
A.TYWM	Michigan Personal Income Tax, Withholding
A.WM	Average Hourly Earnings, Manufacturing
A.WUS	Average Hourly Earnings, U.S. Manufacturing
A.YENTM	Proprietors' Income
A.YOLM	Other Labor Income
A.YPRM	Dividends, Interest, and Rental Income
A.YUCTRM	Unemployment Benefits

The Michigan Economic Outlook for 2009-2010

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The State of Michigan

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Forecast Based on
The Econometric Model of the State of Michigan

RSQE
Research Seminar in Quantitative Economics
The University of Michigan
Ann Arbor, Michigan 48109

Michigan Personal Income

(Millions of Current Dollars, SAQR)

	Actual	Forecast							
	2008q3	2008q4	2009q1	2009q2	2009q3	2009q4	2010q1	2010q2	2010q3
Personal Income	89096.76	89224.56	89458.57	89470.28	89162.93	89413.79	89569.46	89995.56	90575.46
Wage and Salary	47645.50	47434.01	47048.48	46950.71	46935.78	47242.35	47182.18	47503.03	47698.32
Private	40242.20	40116.76	39694.14	39561.77	39509.66	39778.97	39652.99	39854.13	40088.45
Government	7403.30	7317.25	7354.33	7388.94	7426.12	7463.38	7529.20	7648.90	7609.86
Other Labor Income	11332.40	11271.10	11258.55	11226.28	11209.27	11242.20	11313.48	11379.05	11430.05
Proprietors' Income	7471.70	7527.98	7523.50	7563.95	7679.23	7787.11	7883.27	7983.73	8089.04
Property Income	13582.60	13556.11	13502.68	13372.22	13113.45	12811.88	12585.45	12522.27	12726.26
Transfer Payments	16259.75	16575.64	17276.90	17491.06	17356.42	17488.52	17823.72	17879.88	17940.66
Residence Adjustment	390.31	394.16	398.04	401.96	405.92	409.92	413.96	418.04	422.16
Less:									
Social Ins Contrib	7585.50	7534.44	7549.57	7535.91	7537.14	7568.20	7632.60	7690.44	7731.03
Less:									
Federal Pers Taxes	8505.95	8724.82	7825.10	7612.95	8208.53	8224.06	7546.32	7611.77	7711.23
Mich Withholding	1874.40	1840.44	1829.29	1808.24	1835.64	1823.90	1826.68	1823.56	1859.97
Equals:									
Disp Personal Income	78716.41	78659.30	79804.18	80049.09	79118.77	79365.83	80196.46	80560.23	81004.25
ADDENDA:									
Consumer Price Index									
Detroit 1982-84=100	209.08	206.93	206.84	207.64	208.57	209.77	211.03	212.36	213.69
Real Disposable Income									
Millions of 1982-84 $	37648.94	38012.10	38583.43	38552.73	37934.45	37835.10	38001.77	37935.85	37907.93

Michigan Personal Income

(Millions of Current Dollars, SAQR)

	Forecast	Calendar Years				Percent Changes		
	2010q4	2007	2008	2009	2010	2007-2008	2008-2009	2009-2010
Personal Income	91523.99	345885.50	354927.32	357505.58	361664.48	2.61	0.73	1.16
Wage and Salary	48109.65	188062.25	189771.51	188177.32	190493.18	0.91	-0.84	1.23
Private	40481.56	159747.00	160603.21	158544.55	160077.13	0.54	-1.28	0.97
Government	7628.09	28315.25	29168.30	29632.77	30416.05	3.01	1.59	2.64
Other Labor Income	11468.96	44759.75	45177.25	44936.30	45591.54	0.93	-0.53	1.46
Proprietors' Income	8194.89	29364.50	29891.18	30553.79	32150.92	1.79	2.22	5.23
Property Income	13035.73	52340.50	53841.96	52800.23	50869.71	2.87	-1.93	-3.66
Transfer Payments	18084.49	59842.25	64981.64	69612.91	71728.75	8.59	7.13	3.04
Residence Adjustment	426.32	1490.00	1555.47	1615.84	1680.48	4.39	3.88	4.00
Less:								
Social Ins Contrib	7796.04	29974.25	30291.94	30190.82	30850.11	1.06	-0.33	2.18
Less:								
Federal Pers Taxes	7850.42	35191.75	33601.57	31870.64	30719.75	-4.52	-5.15	-3.61
Mich Withholding	1852.71	6802.60	7398.04	7297.06	7362.92	8.75	-1.36	0.90
Equals:								
Disp Personal Income	81820.86	303891.15	313927.71	318337.87	323581.80	3.30	1.40	1.65
ADDENDA:								
Consumer Price Index								
Detroit 1982-84=100	215.02	200.24	206.11	208.20	213.03	2.93	1.01	2.32
Real Disposable Income								
Millions of 1982-84 $	38052.46	151763.91	152316.59	152905.71	151898.02	0.36	0.39	-0.66

Employment in Michigan

(Thousands of Persons, Seasonally Adjusted)

	Actual	Forecast							
	2008q3	2008q4	2009q1	2009q2	2009q3	2009q4	2010q1	2010q2	2010q3
Total Employment	4513.00	4472.97	4440.49	4415.18	4395.70	4378.23	4364.89	4361.56	4360.51
Wage and Salary	4196.00	4145.42	4106.89	4079.23	4056.74	4037.86	4025.70	4025.78	4017.43
Private	3540.20	3502.42	3465.89	3440.23	3419.74	3402.86	3390.20	3385.28	3385.53
Nat. Res. & Mining	7.30	7.19	7.00	6.82	6.74	6.75	6.80	6.90	6.93
Construction	149.00	144.64	138.83	133.46	129.65	126.89	125.28	124.93	125.76
Manufacturing	579.40	561.45	544.47	529.95	517.84	508.07	499.75	493.40	488.21
Trans. Equipment	174.40	162.69	151.41	142.04	134.55	128.64	123.65	119.63	116.28
Other Mfg.	404.90	398.76	393.06	387.91	383.29	379.42	376.11	373.77	371.93
Trade, Trans. & Util.	779.10	772.27	767.47	764.66	761.59	757.98	755.08	753.60	752.93
Information	63.60	63.10	62.66	62.29	62.01	61.77	61.51	61.27	61.05
Financial Activities	206.30	204.06	203.22	202.38	201.55	201.09	201.01	201.08	201.38
Prof. & Bus. Serv.	568.30	561.71	552.44	547.75	544.72	542.44	540.51	541.22	543.76
Edu. & Health Serv.	607.30	610.36	613.06	615.76	618.48	621.21	623.92	626.65	629.38
Leisure & Hospitality	404.10	403.25	402.72	402.87	402.48	401.86	401.61	401.58	401.50
Other Services	175.80	174.39	174.02	174.29	174.67	174.81	174.71	174.65	174.63
Government	655.80	643.00	641.00	639.00	637.00	635.00	635.50	640.50	631.90
Non Wage and Salary	317.00	327.54	333.60	335.95	338.96	340.38	339.19	335.78	343.08
Labor Force	4942.10	4943.75	4934.96	4921.98	4908.36	4890.02	4871.70	4857.92	4851.71
Unemployment	429.20	470.78	494.47	506.79	512.66	511.78	506.81	496.36	491.20
Unemployment Rate (%)	8.68	9.52	10.02	10.30	10.44	10.47	10.40	10.22	10.12
ADDENDA: U.S. DATA (Billions of chained 2000 $, except where noted)									
Gross Domestic Prod	11720.00	11597.77	11537.63	11538.26	11566.43	11598.70	11656.44	11738.71	11829.98
Business Fixed Invest	1428.30	1400.19	1362.46	1315.90	1283.94	1264.07	1250.18	1256.16	1274.02
Gross Vehicle Product	352.10	286.33	296.40	309.02	326.66	340.19	344.80	355.98	363.43
Personal Cons Expend New Autos + Trucks	198.80	170.80	183.97	186.90	193.52	203.11	205.57	213.96	217.08
Light Vehicle Sales (mil)	12.89	10.99	11.70	11.92	12.35	12.93	13.06	13.55	13.70
Unemployment Rate (%)	5.95	6.71	7.34	7.72	7.92	8.09	8.17	8.16	8.07
Personal Consumption Deflator 2000=100	123.15	122.11	122.33	122.89	123.46	124.11	124.80	125.50	126.18
Consumer Price Index 1982-84=100	219.28	216.19	216.56	219.54	219.67	220.07	221.71	225.17	225.65

Employment in Michigan

(Thousands of Persons, Seasonally Adjusted)

	Forecast	Calendar Years				Percent Changes		
	2010q4	2007	2008	2009	2010	2007-2008	2008-2009	2009-2010
Total Employment	4367.07	4659.93	4555.97	4407.40	4363.51	-2.23	-3.26	-1.00
Wage and Salary	4014.17	4261.45	4194.08	4070.18	4020.77	-1.58	-2.95	-1.21
Private	3385.97	3604.40	3544.96	3432.18	3386.75	-1.65	-3.18	-1.32
Nat. Res. & Mining	6.94	7.63	7.22	6.83	6.89	-5.27	-5.51	1.01
Construction	127.35	166.18	151.66	132.20	125.83	-8.74	-12.83	-4.82
Manufacturing	484.07	616.85	578.41	525.08	491.36	-6.23	-9.22	-6.42
Trans. Equipment	113.53	203.78	174.77	139.16	118.27	-14.23	-20.38	-15.01
Other Mfg.	370.53	413.08	403.66	385.92	373.08	-2.28	-4.40	-3.33
Trade, Trans. & Util.	753.01	787.98	780.97	762.93	753.65	-0.89	-2.31	-1.22
Information	60.83	65.60	64.13	62.18	61.17	-2.25	-3.03	-1.64
Financial Activities	201.96	211.38	206.72	202.06	201.36	-2.20	-2.25	-0.35
Prof. & Bus. Serv.	543.57	573.05	570.80	546.84	542.26	-0.39	-4.20	-0.84
Edu. & Health Serv.	632.12	594.95	606.07	617.13	628.02	1.87	1.82	1.77
Leisure & Hospitality	401.54	404.20	403.44	402.48	401.56	-0.19	-0.24	-0.23
Other Services	174.58	176.58	175.50	174.45	174.64	-0.61	-0.60	0.11
Government	628.20	657.05	649.15	638.00	634.03	-1.20	-1.72	-0.62
Non Wage and Salary	352.90	398.48	361.89	337.22	342.74	-9.18	-6.81	1.63
Labor Force	4850.18	5020.00	4969.96	4913.83	4857.88	-1.00	-1.13	-1.14
Unemployment	483.11	360.08	414.02	506.43	494.37	14.98	22.32	-2.38
Unemployment Rate (%)	9.96	7.18	8.33	10.31	10.18	NA	NA	NA
ADDENDA: U.S. DATA (Billions of chained 2000 $, except where noted)								
Gross Domestic Prod	11924.39	11523.90	11672.79	11560.26	11787.38	1.29	-0.96	1.96
Business Fixed Invest	1300.72	1382.95	1420.85	1306.59	1270.27	2.74	-8.04	-2.78
Gross Vehicle Product	372.69	416.03	343.51	318.07	359.22	-17.43	-7.41	12.94
Personal Cons Expend New Autos + Trucks	222.96	254.08	206.30	191.88	214.89	-18.80	-6.99	12.00
Light Vehicle Sales (mil)	14.01	16.09	13.30	12.23	13.58	-17.35	-8.07	11.07
Unemployment Rate (%)	7.98	4.62	5.73	7.77	8.10	NA	NA	NA
Personal Consumption Deflator 2000=100	126.87	117.65	121.77	123.20	125.84	3.50	1.17	2.14
Consumer Price Index 1982-84=100	226.13	207.34	216.08	218.96	224.67	4.21	1.33	2.61

State of Michigan GFGP Revenue by Fiscal Years

(Millions of Current Dollars, NSA)

	Actual	Forecast						
	2008q3	2008q4	2009q1	2009q2	2009q3	2009q4	2010q1	2010q2
NET PERS INCOME TAX	1591.30	1707.61	1534.63	2103.04	1510.15	1622.51	1452.32	1976.61
Less: School Aid	476.90	505.90	494.86	614.77	464.97	498.39	492.81	600.92
Camp Fund	1.50	0.00	0.00	0.00	1.50	0.00	0.00	0.00
GFGP INCOME TAX	1112.90	1201.70	1039.77	1488.27	1043.68	1124.11	959.51	1375.69
CONSUMPTION TAXES								
Sales	19.15	5.05	-27.20	75.43	19.04	19.10	-26.69	76.22
Cigarette Excise	57.20	51.22	47.85	53.34	54.87	49.67	46.55	51.97
Beer and Wine	13.80	12.46	11.03	13.29	14.18	12.37	11.00	13.28
Liquor Specific	9.20	10.72	8.00	9.55	9.27	10.81	8.25	9.85
Use	227.50	216.48	209.25	236.52	222.59	212.23	203.29	229.89
GFGP CONSUM TAXES	326.85	295.94	248.93	388.14	319.94	304.18	242.39	381.22
BUSINESS TAXES								
Single Business	-33.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Michigan Business	1525.30	0.00	0.00	0.00	1841.20	0.00	0.00	0.00
Insur Co Premium	229.00	0.00	0.00	0.00	245.00	0.00	0.00	0.00
Oil + Gas Severance	33.00	17.56	15.41	15.14	14.88	14.72	16.07	16.67
Casino	12.25	0.00	0.00	0.00	2.89	0.00	0.00	0.00
GFGP BUSINESS TAXES	1766.45	17.59	15.41	15.14	2103.97	14.72	16.07	16.67
PROPERTY TAXES								
Inheritance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utility Property	40.90	39.06	0.00	0.00	38.25	36.36	0.00	0.00
Intangibles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GFGP PROPERTY TAXES	40.90	39.06	0.00	0.00	38.25	36.36	0.00	0.00
OTHER GFGP TAXES	39.00	0.00	0.00	0.00	38.00	0.00	0.00	0.00
TOTAL GFGP TAXES	3286.10	1554.30	1304.11	1891.55	3543.84	1479.36	1217.97	1773.58
NONTAX REVENUE	364.50	0.00	0.00	0.00	341.50	0.00	0.00	0.00
TOTAL GFGP REVENUE	3650.60	1554.30	1304.11	1891.55	3885.34	1479.36	1217.97	1773.58
ADDENDA								
Pers Income Adjusted	80422.51	80183.36	79731.24	79515.12	79343.65	79493.47	79378.34	79806.12
Total Employment	4513.00	4472.97	4440.49	4415.18	4395.70	4378.23	4364.89	4361.56
Wage + Salary Income	47645.50	47434.01	47048.48	46950.71	46935.78	47242.35	47182.18	47503.03

State of Michigan GFGP Revenue by Fiscal Years

(Millions of Current Dollars, NSA)

	Forecast		Fiscal Years			Percent Changes	
	2010q3	2010q4	2008	2009	2010	2008-2009	2009-2010
NET PERS INCOME TAX	1464.21	1621.93	7237.70	6855.42	6515.65	-5.28	-4.96
Less: School Aid	468.38	503.91	2137.90	2080.51	2060.51	-2.68	-0.96
Camp Fund	1.50	0.00	1.50	1.50	1.50	0.00	0.00
GFGP INCOME TAX	994.33	1118.02	5098.30	4773.41	4453.64	-6.37	-6.70
CONSUMPTION TAXES							
Sales	20.42	22.28	94.20	72.32	89.06	-23.23	23.14
Cigarette Excise	53.49	48.36	214.50	207.28	201.68	-3.37	-2.70
Beer and Wine	14.23	12.43	51.10	50.96	50.88	-0.27	-0.16
Liquor Specific	9.62	11.15	36.60	37.54	38.52	2.56	2.63
Use	220.85	215.35	911.30	884.85	866.25	-2.90	-2.10
GFGP CONSUM TAXES	318.61	309.56	1307.70	1252.95	1246.40	-4.19	-0.52
BUSINESS TAXES							
Single Business	0.00	0.00	942.50	0.04	0.00	-100.00	-100.00
Michigan Business	1950.30	0.00	1525.30	1841.20	1950.30	20.71	5.93
Insur Co Premium	249.40	0.00	229.00	245.00	249.40	6.99	1.80
Oil + Gas Severance	17.89	18.32	99.40	62.99	65.34	-36.63	3.74
Casino	0.00	0.00	12.25	2.89	0.00	-76.43	-100.00
GFGP BUSINESS TAXES	2217.59	18.32	2808.45	2152.11	2265.04	-23.37	5.25
PROPERTY TAXES							
Inheritance	0.00	0.00	0.00	0.00	0.00	NC	NC
Utility Property	37.71	35.75	84.50	77.31	74.07	-8.51	-4.19
Intangibles	0.00	0.00	0.00	0.00	0.00	NC	NC
GFGP PROPERTY TAXES	37.71	35.75	84.50	77.31	74.07	-8.51	-4.19
OTHER GFGP TAXES	37.80	0.00	39.00	38.00	37.80	-2.56	-0.53
TOTAL GFGP TAXES	3606.04	1481.65	9337.95	8293.79	8076.95	-11.18	-2.61
NONTAX REVENUE	325.70	0.00	364.50	341.50	325.70	-6.31	-4.63
TOTAL GFGP REVENUE	3931.74	1481.65	9702.45	8635.29	8402.65	-11.00	-2.69
ADDENDA							
Pers Income Adjusted	80365.83	81235.55	319337.01	318773.38	319043.75	-0.18	0.08
Total Employment	4360.51	4367.07	4593.83	4431.08	4366.30	-3.54	-1.46
Wage + Salary Income	47698.32	48109.65	189299.00	188368.98	189625.88	-0.49	0.67

State of Michigan SAF and Transportation Tax Revenue by Fiscal Years

(Millions of Current Dollars, NSA)

	Actual	Forecast						
	2008q3	2008q4	2009q1	2009q2	2009q3	2009q4	2010q1	2010q2
SAF TAXES								
Sales	1279.40	1221.45	1075.44	1239.23	1236.61	1220.20	1079.93	1250.22
Use	113.70	108.24	104.63	118.26	111.30	106.11	101.64	114.95
Income	476.90	505.90	494.86	614.77	464.97	498.39	492.81	600.92
Mich Business	341.00	0.00	0.00	0.00	729.00	0.00	0.00	0.00
Liquor Excise	9.20	10.72	8.00	9.55	9.27	10.81	8.25	9.85
Tobacco	114.80	102.70	95.94	106.96	110.01	99.59	93.32	104.21
State Education Property	2030.00	0.00	0.00	0.00	1981.15	0.00	0.00	0.00
Real Estate Transfer	44.80	33.00	28.46	31.63	32.52	25.89	24.10	28.69
Ind and Comm Facilities	78.90	0.00	0.00	0.00	72.90	0.00	0.00	0.00
Casino	112.10	0.00	0.00	0.00	113.30	0.00	0.00	0.00
Other SAF Taxes	17.10	0.00	0.00	0.00	17.10	0.00	0.00	0.00
TOTAL SAF TAXES	4617.90	1982.02	1807.33	2120.40	4878.12	1961.00	1800.05	2108.84
Lottery Transfer	737.20	0.00	0.00	0.00	745.10	0.00	0.00	0.00
EARMARKED STATE SAF REVENUE	5355.10	1982.02	1807.33	2120.40	5623.22	1961.00	1800.05	2108.84
TRANSPORTATION TAXES								
Diesel	28.00	26.55	24.00	26.08	27.66	25.78	23.22	25.41
Gasoline	217.40	216.95	202.04	217.02	216.17	211.76	196.83	212.13
Motor Vehicle Registration	852.20	0.00	0.00	0.00	824.16	0.00	0.00	0.00

State of Michigan SAF and Transportation Tax Revenue by Fiscal Years

(Millions of Current Dollars, NSA)

	Forecast		Fiscal Years			Percent Changes	
	2010q3	2010q4	2008	2009	2010	2008-2009	2009-2010
SAF TAXES							
Sales	1254.73	1246.51	4925.30	4772.73	4805.08	-3.10	0.68
Use	110.42	107.67	455.70	442.42	433.13	-2.91	-2.10
Income	468.38	503.91	2137.90	2080.51	2060.51	-2.68	-0.96
Mich Business	741.00	0.00	341.00	729.00	741.00	113.78	1.65
Liquor Excise	9.62	11.15	36.60	37.54	38.52	2.56	2.63
Tobacco	107.25	96.96	430.10	415.61	404.38	-3.37	-2.70
State Education Property	1911.57	0.00	2030.00	1981.15	1911.57	-2.41	-3.51
Real Estate Transfer	31.70	27.19	175.20	125.61	110.38	-28.31	-12.12
Ind and Comm Facilities	66.40	0.00	78.90	72.90	66.40	-7.60	-8.92
Casino	114.40	0.00	112.10	113.30	114.40	1.07	0.97
Other SAF Taxes	17.10	0.00	17.10	17.10	17.10	-0.00	0.00
TOTAL SAF TAXES	4832.58	1993.41	10739.90	10787.86	10702.47	0.45	-0.79
Lottery Transfer	737.00	0.00	737.20	745.10	737.00	1.07	-1.09
EARMARKED STATE SAF REVENUE	5569.58	1993.41	11477.10	11532.96	11439.47	0.49	-0.81
TRANSPORTATION TAXES							
Diesel	27.03	25.28	106.50	104.30	101.44	-2.07	-2.74
Gasoline	211.55	208.09	845.70	852.18	832.27	0.77	-2.34
Motor Vehicle Registration	812.94	0.00	852.20	824.16	812.94	-3.29	-1.36

Selected State of Michigan Tax Revenues by Fiscal Years

(Millions of Current Dollars, NSA)

	Actual	Forecast						
	2008q3	2008q4	2009q1	2009q2	2009q3	2009q4	2010q1	2010q2
NET PERS INCOME TAX	1591.30	1707.61	1534.63	2103.04	1510.15	1622.51	1452.32	1976.61
Withheld	1787.50	2024.82	1806.26	1732.65	1750.59	2006.62	1803.68	1747.34
Quarterly	218.50	89.45	224.39	309.19	206.22	75.56	217.32	299.74
Annual	40.40	55.64	96.48	600.69	41.84	60.13	97.32	535.93
Less: Refunds	455.10	462.30	592.50	539.50	488.50	519.80	666.00	606.40
Less: School Aid	476.90	505.90	494.86	614.77	464.97	498.39	492.81	600.92
Camp Fund	1.50	0.00	0.00	0.00	1.50	0.00	0.00	0.00
GFGP INCOME TAX	1112.90	1201.70	1039.77	1488.27	1043.68	1124.11	959.51	1375.69
GROSS SALES TAX	1758.80	1678.81	1480.18	1703.35	1699.52	1677.11	1486.33	1718.34
Auto Sales	217.60	114.43	122.97	186.09	204.50	120.58	130.93	195.81
Other Sales	1541.20	1564.39	1357.21	1517.26	1495.03	1556.54	1355.41	1522.52
Less: Local Dist	432.20	434.92	414.94	367.20	421.07	419.98	414.53	368.71
School Aid	1279.40	1221.45	1075.44	1239.23	1236.61	1220.20	1079.93	1250.22
Comp Trans	25.50	15.14	14.75	19.24	20.55	15.58	16.31	20.93
Health Init	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
GFGP SALES TAX	19.15	5.05	-27.20	75.43	19.04	19.10	-26.69	76.22
GROSS USE TAX	341.20	324.72	313.88	354.78	333.89	318.34	304.93	344.84
Less: School Aid	113.70	108.24	104.63	118.26	111.30	106.11	101.64	114.95
GFGP USE TAX	227.50	216.48	209.25	236.52	222.59	212.23	203.29	229.89
GROSS CIGARETTE TAX	287.70	257.40	240.44	268.06	275.71	249.61	233.89	261.17
Less: School Aid	114.80	102.70	95.94	106.96	110.01	99.59	93.32	104.21
Medicaid Trust Fund	96.70	86.49	80.79	90.07	92.64	83.87	78.59	87.75
Other Health Prog	19.00	16.99	15.87	17.69	18.20	16.47	15.44	17.24
GFGP CIGARETTE TAX	57.20	51.22	47.85	53.34	54.87	49.67	46.55	51.97
GROSS SINGLE BUS TAX	38.70	63.05	0.00	0.00	0.00	0.00	0.00	0.00
Less: Refunds	71.80	63.01	0.00	0.00	0.00	0.00	0.00	0.00
GFGP SINGLE BUS TAX	-33.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00
GROSS MICH BUS TAX	1866.30	0.00	0.00	0.00	2570.20	0.00	0.00	0.00
Less: School Aid	341.00	0.00	0.00	0.00	729.00	0.00	0.00	0.00
GFGP MICH BUS TAX	1525.30	0.00	0.00	0.00	1841.20	0.00	0.00	0.00
CASINO TAX	126.10	0.00	0.00	0.00	116.60	0.00	0.00	0.00
Less: School Aid	112.10	0.00	0.00	0.00	113.30	0.00	0.00	0.00
Ag Equine Ind Dev	1.75	0.00	0.00	0.00	0.41	0.00	0.00	0.00
GFGP CASINO TAX	12.25	0.00	0.00	0.00	2.89	0.00	0.00	0.00

Selected State of Michigan Tax Revenues by Fiscal Years

(Millions of Current Dollars, NSA)

	Forecast		Fiscal Years			Percent Changes	
	2010q3	2010q4	2008	2009	2010	2008-2009	2009-2010
NET PERS INCOME TAX	1464.21	1621.93	7237.70	6855.42	6515.65	-5.28	-4.96
Withheld	1773.80	2038.32	7336.20	7314.32	7331.44	-0.30	0.23
Quarterly	197.23	67.16	851.80	829.25	789.85	-2.65	-4.75
Annual	42.28	60.55	870.20	794.65	735.67	-8.68	-7.42
Less: Refunds	549.10	544.10	1820.50	2082.80	2341.30	14.41	12.41
Less: School Aid	468.38	503.91	2137.90	2080.51	2060.51	-2.68	-0.96
Camp Fund	1.50	0.00	1.50	1.50	1.50	0.00	0.00
GFGP INCOME TAX	994.33	1118.02	5098.30	4773.41	4453.64	-6.37	-6.70
GROSS SALES TAX	1724.23	1713.28	6770.80	6561.87	6606.02	-3.09	0.67
Auto Sales	212.72	130.56	745.90	627.98	660.04	-15.81	5.11
Other Sales	1511.51	1582.73	6024.90	5933.89	5945.97	-1.51	0.20
Less: Local Dist	424.70	425.95	1655.00	1638.14	1627.92	-1.02	-0.62
School Aid	1254.73	1246.51	4925.30	4772.73	4805.08	-3.10	0.68
Comp Trans	22.13	16.29	87.00	69.68	74.96	-19.91	7.58
Health Init	2.25	2.25	9.00	9.00	9.00	0.00	0.00
GFGP SALES TAX	20.42	22.28	94.20	72.32	89.06	-23.23	23.14
GROSS USE TAX	331.27	323.02	1367.00	1327.27	1299.38	-2.91	-2.10
Less: School Aid	110.42	107.67	455.70	442.42	433.13	-2.91	-2.10
GFGP USE TAX	220.85	215.35	911.30	884.85	866.25	-2.90	-2.10
GROSS CIGARETTE TAX	268.81	243.01	1077.90	1041.62	1013.48	-3.37	-2.70
Less: School Aid	107.25	96.96	430.10	415.61	404.38	-3.37	-2.70
Medicaid Trust Fund	90.32	81.65	362.20	349.98	340.53	-3.37	-2.70
Other Health Prog	17.74	16.04	71.10	68.75	66.89	-3.31	-2.70
GFGP CIGARETTE TAX	53.49	48.36	214.50	207.28	201.68	-3.37	-2.70
GROSS SINGLE BUS TAX	0.00	0.00	1279.10	63.05	0.00	-95.07	-100.00
Less: Refunds	0.00	0.00	336.60	63.01	0.00	-81.28	-100.00
GFGP SINGLE BUS TAX	0.00	0.00	942.50	0.04	0.00	-100.00	-100.00
GROSS MICH BUS TAX	2691.30	0.00	1866.30	2570.20	2691.30	37.72	4.71
Less: School Aid	741.00	0.00	341.00	729.00	741.00	113.78	1.65
GFGP MICH BUS TAX	1950.30	0.00	1525.30	1841.20	1950.30	20.71	5.93
CASINO TAX	114.40	0.00	126.10	116.60	114.40	-7.53	-1.89
Less: School Aid	114.40	0.00	112.10	113.30	114.40	1.07	0.97
Ag Equine Ind Dev	0.00	0.00	1.75	0.41	0.00	-76.43	-100.00
GFGP CASINO TAX	0.00	0.00	12.25	2.89	0.00	-76.43	-100.00

	A.AEQGM	A.AEQPM	A.AFDC	A.BLDPER	A.ECCM	A.EFINM	A.EINFM	A.EMFOM	A.EMIM	A.EMRESM
2008q4	5.000	425.000	-1.000	-1.650	10.500	-4.700	-1.350	1.300	-0.580	19.000
2009q1	0.000	365.000	-0.400	-1.450	9.200	-4.400	-1.250	-0.900	-0.540	-14.000
2009q2	5.000	310.000	0.000	-1.500	8.200	-4.100	-1.150	-0.900	-0.500	-14.000
2009q3	5.000	255.000	0.500	-1.550	8.200	-3.800	-1.050	-0.900	-0.420	-14.000
2009q4	5.000	245.000	0.300	-1.550	8.200	-3.500	-1.000	-0.900	-0.340	-14.000
2010q1	-20.000	235.000	-1.300	-1.550	8.200	-3.200	-1.000	-0.900	-0.260	-14.000
2010q2	-15.000	225.000	0.000	-1.525	8.200	-2.900	-1.000	-0.900	-0.170	-14.000
2010q3	-15.000	215.000	0.500	-1.500	8.200	-2.600	-1.000	-0.900	-0.170	-14.000
2010q4	-15.000	205.000	0.300	-1.475	8.200	-2.300	-1.000	-0.900	-0.170	-14.000

	A.EMTEQM	A.ESBM	A.ESHM	A.ESLM	A.ESOM	A.ETTUM	A.HOUSEM	A.HRSM	A.LFM	A.PAAAGA
2008q4	4.800	4.700	5.700	-2.500	-2.100	-9.600	-11.000	0.100	20.000	-0.210
2009q1	3.000	0.000	5.400	-3.000	-1.000	-8.000	-12.000	-0.100	15.000	0.040
2009q2	3.000	0.000	5.400	-3.000	-0.700	-6.500	-13.000	-0.300	10.000	0.040
2009q3	3.000	0.000	5.400	-3.000	-0.700	-6.500	-14.000	-0.450	5.000	0.040
2009q4	3.000	0.000	5.400	-2.500	-0.700	-6.500	-15.000	-0.450	0.000	0.040
2010q1	3.000	0.000	5.400	-2.250	-0.700	-6.500	-16.000	-0.450	-2.000	0.040
2010q2	3.000	0.000	5.400	-2.250	-0.700	-6.500	-17.000	-0.450	-2.000	0.040
2010q3	3.000	0.000	5.400	-2.250	-0.700	-6.500	-18.000	-0.450	-2.000	0.040
2010q4	3.000	0.000	5.400	-2.250	-0.700	-6.500	-19.000	-0.450	-2.000	0.040

	A.PCPID	A.PDIESE	A.PSTKNR	A.SEVNR	A.SEVR	A.STKNR0	A.TBWMNS	A.TCIGMN	A.TCTF	A.TDIESE
2008q4	0.500	17.000	-2.700	0.000	0.000	10.000	1.750	-66.000	7.000	6.200
2009q1	0.200	17.000	0.000	0.000	0.000	0.000	0.950	-50.000	6.000	6.200
2009q2	0.200	17.000	0.000	-2.200	-4.000	0.000	0.950	-50.000	6.000	6.200
2009q3	0.200	17.000	0.000	0.000	0.000	0.000	0.950	-50.000	6.000	6.200
2009q4	0.200	17.000	-2.700	0.000	0.000	10.000	1.800	-66.000	7.000	5.200
2010q1	0.150	17.000	0.000	0.000	0.000	0.000	1.000	-50.000	7.000	5.200
2010q2	0.150	17.000	0.000	-1.200	-1.500	0.000	1.000	-50.000	7.000	5.200
2010q3	0.150	17.000	0.000	0.000	0.000	0.000	1.000	-50.000	7.000	5.200
2010q4	0.150	17.000	-2.700	0.000	0.000	10.000	1.850	-66.000	7.000	4.200

	A.TGASMN	A.TLIQMN	A.TRET	A.TRSNVM	A.TRSVM9	A.TSBQAM	A.TSBRMN	A.TSEP	A.TSIM	A.TUPMNS
2008q4	12.000	3.400	1.000	-72.000	-15.000	-45.800	8.800	0.000	51.000	-19.000
2009q1	14.000	2.400	1.000	24.000	-21.000	-59.600	0.000	0.000	-15.000	0.000
2009q2	12.000	3.500	1.000	-7.000	-10.000	-7.200	0.000	0.000	40.000	0.000
2009q3	7.000	2.100	1.000	-39.000	7.000	-74.000	0.000	-142.800	40.000	-18.400
2009q4	12.000	3.650	1.000	-53.000	-27.000	-46.300	0.000	0.000	51.000	-19.000
2010q1	14.000	2.650	1.000	29.000	-33.000	-59.600	0.000	0.000	-15.000	0.000
2010q2	12.000	3.750	1.000	-6.000	-22.000	-7.200	0.000	0.000	40.000	0.000
2010q3	7.000	2.350	1.000	-38.000	-5.000	-74.000	0.000	-143.500	40.000	-17.400
2010q4	12.000	3.900	1.000	-52.000	-32.000	-46.300	0.000	0.000	49.000	-18.000

	A.TUSEMN	A.TVEHRE	A.TYAMNS	A.TYQMNS	A.TYWM	A.WM	A.WUS	A.YENTM	A.YOLM	A.YPRM
2008q4	-21.600	0.000	20.000	11.000	-3.000	-0.270	-0.030	-3.000	-21.000	-56.000
2009q1	-17.440	0.000	16.000	-10.000	8.000	-0.220	-0.030	15.000	-21.000	0.000
2009q2	-22.160	0.000	100.000	-5.000	-9.000	-0.320	-0.030	15.000	-21.000	0.000
2009q3	-36.500	-36.000	0.000	-5.000	19.000	-0.280	-0.030	15.000	-21.000	0.000
2009q4	-26.300	0.000	20.000	-5.000	-6.000	-0.250	-0.030	15.000	-21.000	0.000
2010q1	-22.140	0.000	16.000	-5.000	5.000	-0.220	-0.030	15.000	-21.000	0.000
2010q2	-26.860	0.000	30.000	-13.000	-12.000	-0.220	-0.030	15.000	-21.000	0.000
2010q3	-41.200	-34.000	0.000	-13.000	16.000	-0.220	-0.030	15.000	-21.000	0.000
2010q4	-28.800	0.000	20.000	-13.000	-9.000	-0.220	-0.030	15.000	-21.000	0.000

	A.YUCTRM	S.LFM
2008q4	73.000	1.000
2009q1	68.000	1.000
2009q2	68.000	1.000
2009q3	68.000	1.000
2009q4	68.000	1.000
2010q1	67.900	1.000
2010q2	-21.600	1.000
2010q3	-31.700	1.000
2010q4	29.000	1.000

	ADJRS	BIG3SHR	BONUSQ	CDVA00	CDVT00	D01Q1	D01Q2	D1	D2	D3
2008q3	390.310	45.460	29.900	91.800	107.000	0.000	0.000	0.000	0.000	1.000
2008q4	394.160	44.510	204.200	81.262	89.536	0.000	0.000	0.000	0.000	0.000
2009q1	398.040	43.000	25.000	87.683	96.288	0.000	0.000	1.000	0.000	0.000
2009q2	401.960	42.670	25.000	89.371	97.528	0.000	0.000	0.000	1.000	0.000
2009q3	405.920	42.340	25.000	92.739	100.783	0.000	0.000	0.000	0.000	1.000
2009q4	409.920	42.010	222.700	97.497	105.611	0.000	0.000	0.000	0.000	0.000
2010q1	413.960	41.710	25.000	98.785	106.788	0.000	0.000	1.000	0.000	0.000
2010q2	418.040	41.400	25.000	102.873	111.083	0.000	0.000	0.000	1.000	0.000
2010q3	422.160	41.100	25.000	104.387	112.693	0.000	0.000	0.000	0.000	1.000
2010q4	426.320	40.790	161.900	107.388	115.574	0.000	0.000	0.000	0.000	0.000

	D4	D6973	D7478.1	D78	D7885.1	D83.1	D84ON	D85Q2ON	D86Q298Q1	D8790
2008q3	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2008q4	1.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2009q1	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2009q2	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2009q3	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2009q4	1.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2010q1	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2010q2	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2010q3	0.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000
2010q4	1.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000

	D87ON	D89ON	D90ON	D9196	D93ON	D9499	D95Q4ON	D97ON	D9801	D98Q201Q1
2008q3	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2008q4	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2009q1	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2009q2	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2009q3	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2009q4	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2010q1	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2010q2	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2010q3	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000
2010q4	1.000	1.000	1.000	0.000	1.000	0.000	1.000	1.000	0.000	0.000

	D98Q3	D99Q1	D99Q3	DAUCON	DEGLM	DESTEMP	DFY9701	DGPAY	DPROPA	DSEAS1
2008q3	0.000	0.000	0.000	0.000	0.653	0.000	0.000	0.000	1.500	0.000
2008q4	0.000	0.000	0.000	0.000	0.652	0.000	0.000	0.000	1.500	-1.000
2009q1	0.000	0.000	0.000	0.000	0.651	0.000	0.000	1.000	1.500	1.000
2009q2	0.000	0.000	0.000	0.000	0.650	0.000	0.000	0.000	1.500	0.000
2009q3	0.000	0.000	0.000	0.000	0.649	0.000	0.000	0.000	1.500	0.000
2009q4	0.000	0.000	0.000	0.000	0.648	0.000	0.000	0.000	1.500	-1.000
2010q1	0.000	0.000	0.000	0.000	0.647	0.000	0.000	1.000	1.500	1.000
2010q2	0.000	0.000	0.000	0.000	0.646	0.000	0.000	0.000	1.500	0.000
2010q3	0.000	0.000	0.000	0.000	0.645	0.000	0.000	0.000	1.500	0.000
2010q4	0.000	0.000	0.000	0.000	0.644	0.000	0.000	0.000	1.500	-1.000

	DSEAS2	DSEAS3	DSTKMI	DSTKTOT	DTCASINO	DTIME	DTRSNVNS	DTUSEMNS	DTUSEPDC	DYDADJ
2008q3	0.000	1.000	0.000	0.000	14.000	211.000	-38.900	13.500	0.000	0.000
2008q4	-1.000	-1.000	0.000	0.000	0.000	212.000	-36.300	13.500	0.000	0.000
2009q1	0.000	0.000	0.000	0.000	0.000	213.000	-37.600	13.500	0.000	0.000
2009q2	1.000	0.000	0.000	0.000	0.000	214.000	-37.100	13.500	0.000	0.000
2009q3	0.000	1.000	0.000	0.000	3.300	215.000	-36.400	13.500	0.000	0.000
2009q4	-1.000	-1.000	0.000	0.000	0.000	216.000	-36.300	13.500	0.000	0.000
2010q1	0.000	0.000	0.000	0.000	0.000	217.000	-37.700	13.500	0.000	0.000
2010q2	1.000	0.000	0.000	0.000	0.000	218.000	-37.100	13.500	0.000	0.000
2010q3	0.000	1.000	0.000	0.000	0.000	219.000	-36.400	13.500	0.000	0.000
2010q4	-1.000	-1.000	0.000	0.000	0.000	220.000	-37.100	13.500	0.000	0.000

	DYDMADJ	DYFP	DYOUTH1	EGM	EGOV	EMP	G00	GAS	GAUTO00	GDP00
2008q3	1.560	0.000	0.000	655.800	24.218	137.371	2088.300	62.110	150.900	11720.000
2008q4	0.000	0.000	0.000	643.000	24.235	136.638	2086.898	61.090	115.269	11597.769
2009q1	0.000	0.000	0.000	641.000	24.286	135.876	2082.502	62.260	119.850	11537.627
2009q2	0.000	0.000	0.000	639.000	24.317	135.305	2083.946	62.040	126.161	11538.265
2009q3	0.000	0.000	0.000	637.000	24.348	134.910	2093.484	61.330	135.093	11566.428
2009q4	0.000	0.000	0.000	635.000	24.388	134.626	2092.128	60.330	141.346	11598.702
2010q1	0.000	0.000	0.000	635.500	24.428	134.539	2090.954	61.480	143.873	11656.443
2010q2	0.000	0.000	0.000	640.500	24.469	134.682	2091.621	61.270	148.510	11738.711
2010q3	0.000	0.000	0.000	631.900	24.529	135.005	2096.511	60.570	151.074	11829.977
2010q4	0.000	0.000	0.000	628.200	24.590	135.454	2102.510	59.570	154.894	11924.391

	GTRMCQ	GTROF	GTRSL	GTRUCK00	HS	IBFNC00	IPDIE00	IRC00	JCLH	JIPTOT
2008q3	409.900	1313.300	458.100	201.200	879.000	347.000	147.800	350.500	183.121	109.683
2008q4	417.700	1344.810	462.610	171.059	901.606	349.087	143.681	338.018	184.917	107.597
2009q1	425.800	1415.570	467.170	176.549	850.728	335.146	135.744	330.101	186.615	105.697
2009q2	434.100	1446.450	471.780	182.858	841.850	309.773	128.949	324.307	188.205	104.420
2009q3	442.500	1429.580	476.420	191.569	814.736	289.970	123.588	317.830	189.572	104.319
2009q4	451.100	1448.970	481.120	198.844	837.586	277.476	120.183	315.165	190.500	104.601
2010q1	459.800	1465.140	485.860	200.927	885.698	268.330	118.833	320.419	191.304	105.319
2010q2	468.800	1485.080	490.650	207.469	912.244	262.685	118.212	327.284	191.978	106.528
2010q3	477.900	1505.340	495.480	212.354	947.976	262.116	119.071	335.262	192.672	108.056
2010q4	487.200	1525.870	500.360	217.794	1016.221	265.070	121.201	346.365	193.453	109.708

	JQLH	JUCBENLV	MAUTO00	MFRACSIC	MGNOIL00	MICHFRAC	MIVSHR	MPG	MPOP	MPOP18
2008q3	141.127	401.300	77.100	0.295	1534.000	0.210	4.870	25.500	10034.000	7632.000
2008q4	140.840	402.400	64.209	0.295	1512.801	0.208	4.870	25.700	10026.000	7634.000
2009q1	140.936	403.600	64.892	0.295	1491.586	0.207	4.870	25.700	10019.000	7635.000
2009q2	141.571	404.700	68.403	0.295	1469.045	0.206	4.870	25.700	10011.000	7637.000
2009q3	142.527	405.800	71.763	0.295	1458.590	0.205	4.870	25.700	10009.000	7642.000
2009q4	143.439	407.000	74.228	0.295	1458.293	0.205	4.870	25.900	10006.000	7647.000
2010q1	144.309	408.100	75.289	0.295	1469.541	0.204	4.870	25.900	10004.000	7653.000
2010q2	145.193	409.300	77.089	0.295	1496.749	0.204	4.870	25.900	10001.000	7658.000
2010q3	145.987	410.400	77.963	0.295	1536.891	0.203	4.870	25.900	10001.000	7665.000
2010q4	146.673	411.500	79.256	0.295	1588.803	0.203	4.870	26.100	10000.000	7672.000

	MPOPCS	MTRK00	OIL	PC	PCDV	PCIG	PCNGO	PCPIB	PCPISA	PGAS.C
2008q3	98.762	54.500	1.510	123.147	98.334	597.240	249.661	233.180	218.958	7.180
2008q4	100.211	54.532	1.360	122.112	97.892	606.720	174.946	234.910	216.974	4.310
2009q1	101.682	52.711	1.510	122.333	97.305	616.340	159.981	236.080	217.209	3.550
2009q2	103.174	51.791	1.430	122.889	97.194	626.130	157.840	237.250	218.278	3.550
2009q3	104.688	51.602	1.480	123.461	97.013	636.060	157.643	238.420	219.453	3.460
2009q4	106.224	52.140	1.330	124.113	97.098	646.150	160.796	239.610	220.862	3.540
2010q1	107.783	53.019	1.480	124.803	97.305	656.410	165.307	240.800	222.366	3.670
2010q2	109.364	53.890	1.400	125.495	97.425	666.820	170.828	241.990	223.904	3.850
2010q3	110.969	54.982	1.450	126.177	97.627	677.400	176.303	243.190	225.424	4.120
2010q4	112.597	56.161	1.310	126.865	97.991	688.150	181.604	244.700	226.936	4.400

	PHNEWMW	PHOUSEM	PINC	PIRC	PLIQUOR	POIL.C	POTHRCRU	PPNF	PVEH	PWTI
2008q3	182.400	167.460	164.316	136.241	215.180	123.360	370.300	119.281	25.560	117.980
2008q4	179.630	162.070	166.453	135.227	216.780	59.200	320.000	119.888	25.560	64.910
2009q1	208.240	162.040	167.749	134.334	217.850	52.900	310.000	120.475	26.582	58.000
2009q2	188.580	160.430	168.277	133.639	218.930	52.900	305.000	121.028	26.582	58.000
2009q3	178.750	159.090	168.576	133.184	220.020	52.900	300.000	121.499	26.582	58.000
2009q4	177.840	155.590	168.853	133.288	221.110	55.630	302.960	121.955	26.582	61.000
2010q1	206.160	158.800	169.227	133.748	222.210	59.280	305.940	122.448	26.981	65.000
2010q2	187.630	158.830	169.745	134.455	223.310	63.840	308.960	122.921	26.981	70.000
2010q3	177.860	158.290	170.377	135.192	224.420	68.400	312.000	123.372	26.981	75.000
2010q4	177.840	155.980	171.128	135.932	225.810	72.960	315.070	123.849	26.981	80.000

	QUARTER	RDEPNR	RDEPR	RGAS	RMORT	ROIL	RSBT	RTGAS	RTYAM	RTYQM
2008q3	2008.300	0.000	0.000	0.050	6.320	0.066	1.900	19.000	4.013	4.350
2008q4	2008.400	2.770	1.550	0.050	6.204	0.066	1.900	19.000	4.013	4.350
2009q1	2009.100	0.000	0.000	0.050	6.101	0.066	1.900	19.000	4.350	4.350
2009q2	2009.200	0.000	0.000	0.050	5.997	0.066	1.900	19.000	4.350	4.350
2009q3	2009.300	0.000	0.000	0.050	5.985	0.066	1.900	19.000	4.350	4.350
2009q4	2009.400	2.770	1.550	0.050	6.006	0.066	1.900	19.000	4.350	4.350
2010q1	2010.100	0.000	0.000	0.050	5.918	0.066	1.900	19.000	4.350	4.350
2010q2	2010.200	0.000	0.000	0.050	5.785	0.066	1.900	19.000	4.350	4.350
2010q3	2010.300	0.000	0.000	0.050	5.782	0.066	1.900	19.000	4.350	4.350
2010q4	2010.400	2.770	1.550	0.050	5.791	0.066	1.900	19.000	4.350	4.350

	RTYSANS	RTYWM	RUG	RUM	SBTFAC	SERVE00	SP500	STKMFAC	STRPFRAC	STRSMNS
2008q3	0.230	4.350	5.950	5.670	0.080	6578.500	1251.910	0.000	0.433	2.250
2008q4	0.230	4.350	6.715	6.382	0.125	6585.580	934.600	3.320	0.440	2.250
2009q1	0.230	4.350	7.343	7.039	0.000	6606.650	950.000	0.000	0.440	2.250
2009q2	0.230	4.350	7.724	7.448	0.000	6628.879	970.000	0.000	0.440	2.250
2009q3	0.230	4.350	7.921	7.681	0.000	6649.593	990.000	0.000	0.440	2.250
2009q4	0.230	4.350	8.091	7.881	0.000	6670.208	1040.000	3.298	0.440	2.250
2010q1	0.230	4.350	8.174	7.981	0.000	6697.142	1065.080	0.000	0.440	2.250
2010q2	0.230	4.350	8.156	7.963	0.000	6729.429	1090.760	0.000	0.440	2.250
2010q3	0.230	4.350	8.073	7.861	0.000	6763.616	1111.950	0.000	0.440	2.250
2010q4	0.230	4.350	7.980	7.747	0.000	6800.150	1133.550	3.277	0.440	2.250

	TCASINO	TCIGNRT	TCIGRT	TCIGSART	TCIGSRT	TCTFR	TEXEMPT	TICF	TINHMNS	TINPMNS
2008q3	126.100	0.199	200.000	0.399	0.066	0.279	3500.000	78.900	0.000	229.000
2008q4	0.000	0.199	200.000	0.399	0.066	0.279	3500.000	0.000	0.000	0.000
2009q1	0.000	0.199	200.000	0.399	0.066	0.279	3600.000	0.000	0.000	0.000
2009q2	0.000	0.199	200.000	0.399	0.066	0.279	3600.000	0.000	0.000	0.000
2009q3	116.600	0.199	200.000	0.399	0.066	0.279	3600.000	72.900	0.000	245.000
2009q4	0.000	0.199	200.000	0.399	0.066	0.279	3600.000	0.000	0.000	0.000
2010q1	0.000	0.199	200.000	0.399	0.066	0.279	3700.000	0.000	0.000	0.000
2010q2	0.000	0.199	200.000	0.399	0.066	0.279	3700.000	0.000	0.000	0.000
2010q3	114.400	0.199	200.000	0.399	0.066	0.279	3700.000	66.400	0.000	249.400
2010q4	0.000	0.199	200.000	0.399	0.066	0.279	3700.000	0.000	0.000	0.000

	TINTDLM	TINTMNS	TLOTTERY	TMB	TMBSAF	TNTGFGP	TOTHMNS	TOTHSAF	TP	TPSL
2008q3	0.000	0.000	737.200	1866.300	341.000	364.500	39.000	17.100	1487.500	333.500
2008q4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1526.493	336.536
2009q1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1412.217	336.018
2009q2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1387.900	334.901
2009q3	0.000	0.000	745.100	2570.200	729.000	341.500	38.000	17.100	1477.976	337.993
2009q4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1479.874	339.490
2010q1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1385.998	335.250
2010q2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1389.688	329.502
2010q3	0.000	0.000	737.000	2691.300	741.000	325.700	37.800	17.100	1417.025	339.326
2010q4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1444.466	345.388

	TRKH	TSBDLNS	TSEPFRAC	TSI	TSIB	TSSBASE	TSSRATE	TUPRT	TVFAC	TYCFMNS
2008q3	0.280	0.000	0.000	1002.200	481.100	102000.000	0.076	39.900	0.000	1.500
2008q4	0.275	0.000	0.000	1000.846	480.330	102000.000	0.076	39.900	0.000	0.000
2009q1	0.260	0.000	0.000	1015.427	486.993	106800.000	0.076	39.900	0.000	0.000
2009q2	0.244	0.000	0.979	1018.214	488.164	106800.000	0.076	39.900	83.000	0.000
2009q3	0.232	0.000	0.000	1022.364	489.974	106800.000	0.076	39.900	0.000	1.500
2009q4	0.228	0.000	0.000	1026.203	491.637	106800.000	0.076	39.900	0.000	0.000
2010q1	0.235	0.000	0.000	1045.235	500.370	111300.000	0.076	39.900	0.000	0.000
2010q2	0.252	0.000	0.979	1052.465	503.616	111300.000	0.076	39.900	86.000	0.000
2010q3	0.278	0.000	0.000	1060.982	507.462	111300.000	0.076	39.900	0.000	1.500
2010q4	0.307	0.000	0.000	1070.170	511.618	111300.000	0.076	39.900	0.000	0.000

	TYDLNS	TYRMNS	TYWSF	VEHL	YAVAFDC	YD	YFP	YGWS	YNFP	YOL
2008q3	0.000	455.100	95.367	12.889	1307.270	10732.400	31.200	1138.200	1048.800	1031.200
2008q4	0.000	462.300	110.018	10.994	1240.000	10764.566	29.746	1149.900	1061.518	1036.940
2009q1	0.000	592.500	98.741	11.701	1240.000	10986.682	30.343	1169.000	1060.686	1043.054
2009q2	0.000	539.500	95.820	11.918	1248.000	11085.327	31.444	1179.700	1065.738	1049.674
2009q3	0.000	488.500	95.367	12.351	1314.000	11006.140	32.318	1190.600	1081.784	1056.669
2009q4	0.000	519.800	110.018	12.933	1247.000	11034.196	33.017	1202.000	1097.011	1063.858
2010q1	0.000	666.000	98.741	13.059	1246.000	11170.730	33.590	1221.000	1110.740	1071.316
2010q2	0.000	606.400	95.820	13.546	1254.000	11238.734	34.069	1232.600	1125.224	1079.172
2010q3	0.000	549.100	95.367	13.698	1320.000	11334.494	34.480	1245.500	1140.517	1087.457
2010q4	0.000	544.100	110.018	14.011	1253.000	11467.535	34.838	1258.400	1155.986	1096.192

	YOTRM	YP	YPDIV	YPINT	YPRENT	YPWS	YSSTRM	YUNB
2008q3	9338.700	12219.900	838.300	1232.300	64.300	5485.100	6004.610	58.700
2008q4	9531.720	12291.059	828.651	1233.133	80.500	5482.962	6045.980	68.145
2009q1	9835.670	12398.899	826.280	1228.592	81.700	5493.087	6438.610	79.031
2009q2	10020.220	12473.227	825.721	1210.010	82.900	5520.109	6480.560	86.759
2009q3	9848.110	12484.116	812.987	1183.187	84.100	5544.278	6522.520	91.433
2009q4	9945.150	12514.070	797.092	1152.622	85.300	5558.699	6564.480	95.637
2010q1	10219.510	12556.728	784.685	1130.506	86.400	5580.903	6627.800	97.973
2010q2	10320.210	12628.422	775.860	1130.832	87.400	5616.790	6677.990	85.945
2010q3	10421.900	12751.520	773.705	1166.988	88.500	5660.732	6728.190	72.531
2010q4	10524.590	12912.001	782.609	1209.023	89.600	5712.541	6778.380	71.154

	AEQGM	AEQPM	AFDC	BLDPERM	ECCM	EFINM	EINFM	EMFM	EMFOM	EMICH
2008q3	11288.960	11367.211	68.876	2.519	149.000	206.300	63.600	579.400	404.900	4513.000
2008q4	11379.866	11453.995	66.822	2.226	144.637	204.061	63.102	561.445	398.756	4472.967
2009q1	11473.214	11452.808	65.923	2.206	138.826	203.219	62.660	544.467	393.057	4440.488
2009q2	11563.287	11499.753	64.909	2.233	133.458	202.378	62.292	529.952	387.908	4415.182
2009q3	11657.953	11553.423	64.229	2.299	129.648	201.554	62.012	517.842	383.290	4395.701
2009q4	11753.361	11689.869	64.852	2.406	126.887	201.092	61.768	508.065	379.423	4378.235
2010q1	11847.672	11696.348	64.837	2.622	125.281	201.010	61.515	499.755	376.108	4364.893
2010q2	11942.073	11772.772	64.309	2.948	124.926	201.083	61.266	493.404	373.772	4361.557
2010q3	12042.831	11841.113	63.904	3.324	125.764	201.379	61.046	488.211	371.927	4360.509
2010q4	12142.769	11955.682	64.649	3.782	127.346	201.958	60.835	484.066	370.531	4367.071

	EMIM	EMRESM	EMTEQM	EPM	ESBM	ESHM	ESLM	ESM	ESOM	ETTUM
2008q3	7.300	317.000	174.400	3540.200	568.300	607.300	404.100	1755.500	175.800	779.100
2008q4	7.194	327.542	162.690	3502.425	561.709	610.362	403.254	1749.713	174.388	772.273
2009q1	7.003	333.600	151.410	3465.888	552.445	613.055	402.722	1742.242	174.021	767.470
2009q2	6.817	335.955	142.044	3440.228	547.754	615.762	402.868	1740.669	174.285	764.661
2009q3	6.736	338.965	134.552	3419.737	544.721	618.479	402.482	1740.353	174.671	761.592
2009q4	6.746	340.377	128.642	3402.858	542.444	621.206	401.857	1740.316	174.809	757.984
2010q1	6.804	339.190	123.647	3390.202	540.509	623.924	401.611	1740.758	174.713	755.080
2010q2	6.901	335.777	119.632	3385.280	541.221	626.652	401.578	1744.102	174.651	753.598
2010q3	6.933	343.078	116.284	3385.531	543.758	629.385	401.499	1749.269	174.628	752.929
2010q4	6.939	352.903	113.534	3385.968	543.572	632.125	401.539	1751.815	174.580	753.010

	EWSM	HOUSCOMP	HOUSEM	HRSM	LFM	MVPROD00	MVQLH00	NEWREGM	NEWREGMQ	NTCASINO
2008q3	4196.000	967.940	139.700	42.300	4942.100	73.941	10.023	723.645	641.330	12.250
2008q4	4145.425	902.869	134.415	41.217	4943.747	59.556	8.882	0.000	548.788	0.000
2009q1	4106.888	878.486	130.933	41.466	4934.961	61.355	9.772	0.000	582.529	0.000
2009q2	4079.228	852.176	127.934	41.559	4921.976	63.658	10.784	0.000	592.314	0.000
2009q3	4056.737	831.621	126.124	41.639	4908.364	66.966	11.952	584.108	612.804	2.888
2009q4	4037.858	826.816	123.493	41.712	4890.016	69.739	12.997	0.000	640.977	0.000
2010q1	4025.702	855.027	122.913	41.694	4871.699	70.339	13.644	0.000	647.453	0.000
2010q2	4025.780	891.770	123.752	41.854	4857.921	72.620	14.503	0.000	671.980	0.000
2010q3	4017.431	924.239	125.638	41.980	4851.706	73.776	15.113	660.258	680.622	0.000
2010q4	4014.168	972.383	128.454	42.149	4850.177	75.656	15.810	0.000	697.273	0.000

	NTCIGMNS	NTMB	NTRSMNS	NTSBMNS	NTUSEMNS	NTYMNS	PAAAGAS	PCPID	PDIESEL	PSTKNR
2008q3	57.200	1525.300	19.150	-33.100	227.500	1112.900	3.925	209.080	372.700	0.000
2008q4	51.223	0.000	5.049	0.037	216.483	1201.704	2.356	206.932	274.290	151.221
2009q1	47.848	0.000	-27.200	0.000	209.253	1039.766	2.143	206.835	239.613	0.000
2009q2	53.345	0.000	75.429	0.000	236.523	1488.268	2.298	207.635	231.702	0.000
2009q3	54.866	1841.200	19.041	0.000	222.591	1043.676	2.343	208.567	224.836	0.000
2009q4	49.672	0.000	19.104	0.000	212.226	1124.115	2.368	209.768	239.310	153.975
2010q1	46.545	0.000	-26.687	0.000	203.287	959.506	2.391	211.033	241.176	0.000
2010q2	51.973	0.000	76.221	0.000	229.894	1375.688	2.643	212.359	251.236	0.000
2010q3	53.493	1950.300	20.418	0.000	220.846	994.329	2.745	213.687	258.484	0.000
2010q4	48.359	0.000	22.276	0.000	215.346	1118.020	2.767	215.021	281.666	156.445

	PSTKR	REGVAL1	REGVAL2	REGVAL3	REGVAL4	REGVALR	RUMICH	SEV	SEVNR	SEVR
2008q3	0.000	18496.373	20728.174	18436.343	17028.927	95750.183	8.684	0.000	0.000	0.000
2008q4	132.550	0.000	0.000	0.000	0.000	0.000	9.523	0.000	0.000	0.000
2009q1	0.000	0.000	0.000	0.000	0.000	0.000	10.020	0.000	0.000	0.000
2009q2	0.000	0.000	0.000	0.000	0.000	0.000	10.297	426.257	137.865	288.392
2009q3	0.000	15526.771	16480.268	18282.250	16260.854	98282.580	10.445	0.000	0.000	0.000
2009q4	129.876	0.000	0.000	0.000	0.000	0.000	10.466	0.000	0.000	0.000
2010q1	0.000	0.000	0.000	0.000	0.000	0.000	10.403	0.000	0.000	0.000
2010q2	0.000	0.000	0.000	0.000	0.000	0.000	10.218	397.988	137.024	260.964
2010q3	0.000	17814.419	13834.353	14535.596	16124.944	100278.296	10.124	0.000	0.000	0.000
2010q4	132.778	0.000	0.000	0.000	0.000	0.000	9.961	0.000	0.000	0.000

	STCIGMNS	STKNR	STKNR00	STKR	STKR00	STKRM	TAXVAL	TBWMNS	TCASSAF	TCIGBSF
2008q3	19.000	0.000	0.000	0.000	0.000	0.000	0.000	13.800	112.100	96.700
2008q4	16.989	10907.255	7212.810	17376.099	13109.079	576.886	0.000	12.463	0.000	86.487
2009q1	15.869	0.000	0.000	0.000	0.000	0.000	0.000	11.032	0.000	80.789
2009q2	17.692	0.000	0.000	0.000	0.000	0.000	353.794	13.293	0.000	90.069
2009q3	18.197	0.000	0.000	0.000	0.000	0.000	0.000	14.176	113.300	92.638
2009q4	16.474	11280.403	7326.107	17179.637	13227.739	566.584	0.000	12.368	0.000	83.869
2010q1	15.437	0.000	0.000	0.000	0.000	0.000	0.000	11.004	0.000	78.589
2010q2	17.237	0.000	0.000	0.000	0.000	0.000	342.270	13.281	0.000	87.754
2010q3	17.741	0.000	0.000	0.000	0.000	0.000	0.000	14.231	114.400	90.320
2010q4	16.039	11573.355	7397.724	17732.527	13355.042	581.095	0.000	12.427	0.000	81.651

	TCIGMNS	TCIGSAF	TCTF	TDIESEL	TGASMNS	TGFGP	TGFGPRV	TLIQMNS	TOILMNS	TRESM
2008q3	287.700	114.800	25.500	28.000	217.400	3286.100	3650.600	9.200	33.000	8505.951
2008q4	257.402	102.703	15.141	26.549	216.950	1554.299	1554.299	10.722	17.558	8724.823
2009q1	240.445	95.937	14.749	24.003	202.042	1304.108	1304.108	7.999	15.409	7825.103
2009q2	268.063	106.957	19.239	26.079	217.019	1891.546	1891.546	9.548	15.139	7612.949
2009q3	275.708	110.007	20.549	27.664	216.169	3543.837	3885.337	9.269	14.882	8208.528
2009q4	249.609	99.594	15.578	25.781	211.756	1479.361	1479.361	10.805	14.715	8224.061
2010q1	233.895	93.324	16.315	23.221	196.832	1217.969	1217.969	8.246	16.068	7546.322
2010q2	261.172	104.208	20.931	25.408	212.131	1773.576	1773.576	9.849	16.671	7611.771
2010q3	268.808	107.255	22.134	27.030	211.548	3606.040	3931.740	9.623	17.889	7711.233
2010q4	243.010	96.961	16.288	25.279	208.088	1481.647	1481.647	11.151	18.320	7850.423

	TRET	TRSDLNS	TRSMNS	TRSNVADJ	TRSNVMNS	TRSSANS	TRSVADJ	TRSVM00	TRSVMN00	TRSVMNS
2008q3	44.800	432.200	1758.800	1053.400	1541.200	1279.400	141.900	212.900	221.300	217.600
2008q4	33.002	434.924	1678.813	1067.124	1564.387	1221.450	93.792	140.688	116.890	114.427
2009q1	28.460	414.943	1480.182	929.875	1357.213	1075.440	83.944	125.916	126.376	122.970
2009q2	31.627	367.202	1703.352	1036.243	1517.264	1239.231	110.634	165.951	191.461	186.088
2009q3	32.519	421.073	1699.524	1020.952	1495.027	1236.611	135.198	202.797	210.793	204.496
2009q4	25.892	419.978	1677.114	1061.891	1556.537	1220.203	99.642	149.463	124.181	120.577
2010q1	24.100	414.532	1486.335	928.738	1355.407	1079.925	89.376	134.064	134.554	130.928
2010q2	28.691	368.715	1718.339	1039.750	1522.524	1250.222	116.141	174.211	200.991	195.815
2010q3	31.699	424.699	1724.229	1031.937	1511.505	1254.728	139.752	209.629	217.894	212.724
2010q4	27.192	425.955	1713.284	1079.884	1582.727	1246.515	106.906	160.359	133.234	130.557

	TSAF	TSAFCONS	TSBQAADJ	TSBQAMNS	TSBRMNS	TSEP	TSIM	TUPMNS	TUSEADJ	TUSEMNS
2008q3	4617.900	5355.100	585.900	38.700	71.800	2030.000	7585.500	40.900	218.470	341.200
2008q4	1982.021	1982.021	610.589	63.050	63.013	0.000	7534.440	39.061	207.483	324.724
2009q1	1807.326	1807.326	552.425	0.000	0.000	0.000	7549.569	0.000	200.253	313.879
2009q2	2120.395	2120.395	758.465	0.000	0.000	0.000	7535.908	0.000	227.523	354.785
2009q3	4878.121	5623.221	560.618	0.000	0.000	1981.146	7537.137	38.248	213.591	333.887
2009q4	1961.002	1961.002	591.584	0.000	0.000	0.000	7568.205	36.356	203.226	318.339
2010q1	1800.053	1800.053	539.728	0.000	0.000	0.000	7632.597	0.000	194.287	304.930
2010q2	2108.837	2108.837	747.563	0.000	0.000	0.000	7690.441	0.000	220.894	344.841
2010q3	4832.583	5569.583	556.417	0.000	0.000	1911.570	7731.025	37.711	211.846	331.269
2010q4	1993.406	1993.406	591.310	0.000	0.000	0.000	7796.044	35.749	206.346	323.019

	TUSESANS	TVEHREG	TYAMNS	TYMNS	TYQMNS	TYSANS	TYWM	TYWMNS	UMICH	WM
2008q3	113.700	852.200	40.400	1591.300	218.500	476.900	1874.400	1787.500	429.200	22.280
2008q4	108.241	0.000	55.636	1707.606	89.453	505.902	1840.442	2024.817	470.780	22.237
2009q1	104.626	0.000	96.480	1534.629	224.393	494.863	1829.286	1806.256	494.473	22.292
2009q2	118.262	0.000	600.693	2103.038	309.191	614.770	1808.238	1732.654	506.793	22.395
2009q3	111.296	824.164	41.841	1510.149	206.217	464.973	1835.636	1750.591	512.663	22.518
2009q4	106.113	0.000	60.129	1622.510	75.558	498.395	1823.904	2006.623	511.781	22.634
2010q1	101.643	0.000	97.323	1452.320	217.318	492.814	1826.676	1803.678	506.806	22.734
2010q2	114.947	0.000	535.933	1976.608	299.740	600.921	1823.561	1747.336	496.364	22.812
2010q3	110.423	812.938	42.281	1464.214	197.232	468.385	1859.974	1773.801	491.197	22.898
2010q4	107.673	0.000	60.550	1621.934	67.164	503.914	1852.714	2038.319	483.106	22.977

	WSGM	WSM	WSPM	WUS	YA	YAFDC	YDM	YDM824	YDM824AJ	YDMADJ
2008q3	7403.300	47645.500	40242.200	17.780	2476.813	90.039	78716.409	37648.943	37649.689	78717.969
2008q4	7317.254	47434.012	40116.758	17.896	2491.309	82.859	78659.298	38012.102	38012.102	78659.298
2009q1	7354.330	47048.475	39694.145	18.007	2788.445	81.744	79804.183	38583.433	38583.433	79804.183
2009q2	7388.941	46950.711	39561.771	18.110	2811.965	81.006	80049.094	38552.729	38552.729	80049.094
2009q3	7426.116	46935.779	39509.663	18.200	2829.128	84.396	79118.768	37934.452	37934.452	79118.768
2009q4	7463.384	47242.353	39778.968	18.264	2831.642	80.871	79365.826	37835.096	37835.096	79365.826
2010q1	7529.196	47182.182	39652.986	18.315	2817.616	80.786	80196.465	38001.770	38001.770	80196.465
2010q2	7648.898	47503.028	39854.131	18.356	2802.817	80.644	80560.227	37935.852	37935.852	80560.227
2010q3	7609.865	47698.319	40088.454	18.395	2793.090	84.354	81004.255	37907.931	37907.931	81004.255
2010q4	7628.088	48109.649	40481.561	18.437	2802.467	81.005	81820.857	38052.463	38052.463	81820.857

	YENTM	YENTUS	YOLM	YPADJM	YPERM	YPERM824	YPM	YPM824	YPRM	YPRUS
2008q3	7471.700	1080.000	11332.400	80422.510	77735.279	38022.196	89096.760	42613.717	13582.600	2134.900
2008q4	7527.982	1091.265	11271.101	80183.361	78133.562	38034.395	89224.562	43117.765	13556.107	2142.284
2009q1	7523.499	1091.030	11258.550	79731.240	78715.886	38177.336	89458.573	43251.102	13502.676	2136.572
2009q2	7563.954	1097.183	11226.278	79515.125	79247.998	38307.390	89470.282	43090.100	13372.221	2118.632
2009q3	7679.228	1114.102	11209.272	79343.650	79386.545	38244.126	89162.932	42750.248	13113.451	2080.274
2009q4	7787.113	1130.028	11242.201	79493.470	79355.129	38087.905	89413.790	42625.138	12811.885	2035.014
2010q1	7883.268	1144.330	11313.481	79378.337	79628.939	38096.023	89569.462	42443.244	12585.446	2001.590
2010q2	7983.726	1159.293	11379.050	79806.118	79950.273	38058.639	89995.558	42378.954	12522.275	1994.092
2010q3	8089.038	1174.997	11430.049	80365.828	80246.113	37980.431	90575.461	42387.012	12726.262	2029.193
2010q4	8194.889	1190.825	11468.961	81235.551	80686.780	37959.249	91523.994	42565.105	13035.731	2081.232

	YQ	YTM824	YTRM	YUCTRM
2008q3	21054.300	-373.253	16259.750	826.400
2008q4	21084.089	-22.293	16575.641	915.082
2009q1	21026.175	406.097	17276.902	920.878
2009q2	20936.176	245.339	17491.065	909.279
2009q3	20792.679	-309.674	17356.418	901.392
2009q4	20598.997	-252.810	17488.525	898.024
2010q1	20468.714	-94.253	17823.723	895.626
2010q2	20506.000	-122.787	17879.880	801.036
2010q3	20815.300	-72.500	17940.658	706.214
2010q4	21230.621	93.214	18084.487	700.512

	AEQGM	AEQPM	AFDC	BLDPERM	ECCM	EFINM	EINFM	EMFM	EMFOM	EMICH
2008q3	3.360	2.591	-15.576	-43.386	-7.907	-2.105	-6.050	-0.207	0.595	-6.876
2008q4	3.260	3.089	-11.406	-38.999	-11.209	-4.272	-3.095	-11.831	-5.933	-3.501
2009q1	3.322	-0.041	-5.276	-3.643	-15.128	-1.639	-2.770	-11.559	-5.595	-2.873
2009q2	3.177	1.650	-6.012	5.081	-14.591	-1.645	-2.328	-10.244	-5.137	-2.260
2009q3	3.315	1.880	-4.125	12.309	-10.941	-1.619	-1.792	-8.832	-4.678	-1.753
2009q4	3.314	4.808	3.942	20.067	-8.251	-0.915	-1.562	-7.341	-3.974	-1.580
2010q1	3.249	0.222	-0.098	40.884	-4.966	-0.163	-1.631	-6.384	-3.450	-1.213
2010q2	3.225	2.639	-3.213	59.952	-1.129	0.145	-1.606	-4.987	-2.461	-0.305
2010q3	3.418	2.342	-2.496	61.482	2.709	0.590	-1.428	-4.144	-1.960	-0.096
2010q4	3.361	3.927	4.740	67.708	5.127	1.155	-1.377	-3.354	-1.493	0.603

	EMIM	EMRESM	EMTEQM	EPM	ESBM	ESHM	ESLM	ESM	ESOM	ETTUM
2008q3	11.753	-54.935	-2.484	-2.008	-7.382	2.475	0.496	-1.535	0.000	-2.874
2008q4	-5.694	13.981	-24.272	-4.200	-4.559	2.032	-0.835	-1.312	-3.174	-3.459
2009q1	-10.169	7.606	-24.980	-4.108	-6.436	1.777	-0.527	-1.697	-0.840	-2.465
2009q2	-10.254	2.853	-22.541	-2.929	-3.353	1.778	0.145	-0.361	0.609	-1.456
2009q3	-4.663	3.632	-19.485	-2.361	-2.197	1.776	-0.382	-0.073	0.889	-1.595
2009q4	0.642	1.676	-16.446	-1.960	-1.662	1.775	-0.620	-0.009	0.317	-1.882
2010q1	3.480	-1.387	-14.649	-1.479	-1.419	1.762	-0.244	0.102	-0.220	-1.524
2010q2	5.786	-3.965	-12.370	-0.579	0.528	1.760	-0.033	0.771	-0.142	-0.783
2010q3	1.884	8.985	-10.733	0.030	1.888	1.756	-0.079	1.190	-0.052	-0.355
2010q4	0.337	11.957	-9.128	0.052	-0.137	1.753	0.040	0.583	-0.109	0.043

	EWSM	HOUSCOMP	HOUSEM	HRSM	LFM	MVPROD00	MVQLH00	NEWREGM	NEWREGMQ	NTCASINO
2008q3	-1.061	-28.145	-3.089	2.888	-4.023	-3.489	-3.809	NC	-30.577	NC
2008q4	-4.735	-24.299	-14.295	-9.852	0.133	-57.911	-38.346	-100.000	-46.384	-100.000
2009q1	-3.667	-10.373	-9.968	2.439	-0.709	12.636	46.567	NC	26.956	NC
2009q2	-2.667	-11.452	-8.852	0.897	-1.048	15.883	48.276	NC	6.890	NC
2009q3	-2.187	-9.305	-5.540	0.776	-1.102	22.462	50.927	NC	14.572	NC
2009q4	-1.848	-2.291	-8.085	0.695	-1.487	17.622	39.802	-100.000	19.697	-100.000
2010q1	-1.199	14.363	-1.864	-0.170	-1.490	3.487	21.457	NC	4.103	NC
2010q2	0.008	18.329	2.756	1.547	-1.126	13.614	27.676	NC	16.036	NC
2010q3	-0.827	15.379	6.239	1.205	-0.511	6.522	17.909	NC	5.244	NC
2010q4	-0.324	22.521	9.271	1.624	-0.126	10.589	19.752	-100.000	10.150	NC

	NTCIGMNS	NTMB	NTRSMNS	NTSBMNS	NTUSEMNS	NTYMNS	PAAAGAS	PCPID	PDIESEL	PSTKNR
2008q3	20.452	NC	-99.435	-99.961	-22.027	-78.152	10.759	7.970	-12.453	NC
2008q4	-35.691	-100.000	-99.517	-100.000	-18.008	35.946	-87.023	-4.046	-70.664	NC
2009q1	-23.860	NC	84118.069	-100.000	-12.705	-43.953	-31.555	-0.187	-41.762	-100.000
2009q2	54.486	NC	5814.148	NC	63.234	319.742	32.400	1.556	-12.567	NC
2009q3	11.905	NC	-99.594	NC	-21.560	-75.815	7.939	1.807	-11.337	NC
2009q4	-32.819	-100.000	1.337	NC	-17.366	34.580	4.399	2.323	28.345	NC
2010q1	-22.903	NC	280.822	NC	-15.813	-46.918	3.917	2.436	3.155	-100.000
2010q2	55.462	NC	6553.789	NC	63.559	322.560	49.364	2.536	17.760	NC
2010q3	12.218	NC	-99.485	NC	-14.838	-72.708	16.323	2.524	12.048	NC
2010q4	-33.208	-100.000	41.676	NC	-9.596	59.837	3.164	2.521	40.997	NC

	PSTKR	REGVAL1	REGVAL2	REGVAL3	REGVAL4	REGVALR	RUMICH	SEV	SEVNR	SEVR
2008q3	NC	NC	NC	NC	NC	NC	39.538	-100.000	-100.000	-100.000
2008q4	NC	-100.000	-100.000	-100.000	-100.000	-100.000	44.600	NC	NC	NC
2009q1	-100.000	NC	NC	NC	NC	NC	22.571	NC	NC	NC
2009q2	NC	NC	NC	NC	NC	NC	11.514	NC	NC	NC
2009q3	NC	NC	NC	NC	NC	NC	5.880	-100.000	-100.000	-100.000
2009q4	NC	-100.000	-100.000	-100.000	-100.000	-100.000	0.813	NC	NC	NC
2010q1	-100.000	NC	NC	NC	NC	NC	-2.378	NC	NC	NC
2010q2	NC	NC	NC	NC	NC	NC	-6.942	NC	NC	NC
2010q3	NC	NC	NC	NC	NC	NC	-3.606	-100.000	-100.000	-100.000
2010q4	NC	-100.000	-100.000	-100.000	-100.000	-100.000	-6.310	NC	NC	NC

	STCIGMNS	STKNR	STKNR00	STKR	STKR00	STKRM	TAXVAL	TBWMNS	TCASSAF	TCIGBSF
2008q3	21.423	NC	NC	NC	NC	NC	-100.000	9.190	NC	21.525
2008q4	-36.084	NC	NC	NC	NC	NC	NC	-33.487	-100.000	-36.012
2009q1	-23.860	-100.000	-100.000	-100.000	-100.000	-100.000	NC	-38.590	NC	-23.860
2009q2	54.486	NC	NC	NC	NC	NC	NC	110.780	NC	54.486
2009q3	11.905	NC	NC	NC	NC	NC	-100.000	29.351	NC	11.905
2009q4	-32.819	NC	NC	NC	NC	NC	NC	-42.065	-100.000	-32.819
2010q1	-22.903	-100.000	-100.000	-100.000	-100.000	-100.000	NC	-37.340	NC	-22.903
2010q2	55.462	NC	NC	NC	NC	NC	NC	112.202	NC	55.462
2010q3	12.218	NC	NC	NC	NC	NC	-100.000	31.838	NC	12.218
2010q4	-33.208	NC	NC	NC	NC	NC	NC	-41.861	-100.000	-33.208

	TCIGMNS	TCIGSAF	TCTF	TDIESEL	TGASMNS	TGFGP	TGFGPRV	TLIQMNS	TOILMNS	TRESM
2008q3	21.196	21.255	25.341	2.909	10.794	332.299	558.442	-4.232	140.476	69.684
2008q4	-35.925	-35.942	-87.571	-19.166	-0.825	-94.995	-96.714	84.464	-91.987	10.697
2009q1	-23.860	-23.860	-9.966	-33.187	-24.781	-50.442	-50.442	-69.022	-40.670	-35.296
2009q2	54.486	54.486	189.558	39.332	33.113	342.602	342.602	103.044	-6.825	-10.412
2009q3	11.905	11.905	30.138	26.618	-1.557	1132.047	1680.111	-11.210	-6.637	35.160
2009q4	-32.819	-32.819	-66.968	-24.570	-7.919	-96.963	-97.898	84.692	-4.401	0.759
2010q1	-22.903	-22.903	20.293	-34.187	-25.348	-54.054	-54.054	-66.075	42.175	-29.108
2010q2	55.462	55.462	170.924	43.351	34.907	349.630	349.630	103.444	15.862	3.515
2010q3	12.218	12.218	25.048	28.078	-1.096	1608.922	2315.123	-8.839	32.582	5.330
2010q4	-33.208	-33.208	-70.673	-23.501	-6.382	-97.150	-97.983	80.310	10.002	7.418

	TRET	TRSDLNS	TRSMNS	TRSNVADJ	TRSNVMNS	TRSSANS	TRSVADJ	TRSVM00	TRSVMN00	TRSVMNS
2008q3	41.171	66.289	1.817	-2.283	-2.805	1.674	118.598	119.054	44.338	43.828
2008q4	-70.551	2.545	-16.987	5.314	6.155	-16.924	-80.913	-80.931	-92.216	-92.353
2009q1	-44.695	-17.148	-39.570	-42.345	-43.348	-39.904	-35.837	-35.837	36.629	33.377
2009q2	52.508	-38.671	75.370	54.222	56.190	76.305	201.718	201.718	426.817	424.417
2009q3	11.760	72.906	-0.896	-5.773	-5.735	-0.843	123.012	123.012	46.929	45.838
2009q4	-59.808	-1.037	-5.171	17.031	17.501	-5.202	-70.496	-70.496	-87.955	-87.913
2010q1	-24.938	-5.087	-38.310	-41.487	-42.504	-38.646	-35.270	-35.270	37.837	39.019
2010q2	100.854	-37.406	78.636	57.088	59.213	79.628	185.143	185.143	397.876	400.328
2010q3	49.014	76.021	1.378	-2.972	-2.864	1.449	109.651	109.651	38.126	39.278
2010q4	-45.855	1.188	-2.515	19.921	20.222	-2.593	-65.757	-65.757	-86.021	-85.811

	TSAF	TSAFCONS	TSBQAADJ	TSBQAMNS	TSBRMNS	TSEP	TSIM	TUPMNS	TUSEADJ	TUSEMNS
2008q3	1802.931	3341.243	-72.489	-99.977	-31.072	NC	-0.395	NC	-22.879	-22.115
2008q4	-96.606	-98.123	17.951	604.522	-40.677	-100.000	-2.665	-16.809	-18.649	-17.960
2009q1	-30.863	-30.863	-32.996	-100.000	-100.000	NC	0.806	-100.000	-13.227	-12.705
2009q2	89.462	89.462	255.344	NC	NC	NC	-0.722	NC	66.644	63.234
2009q3	2701.192	4846.218	-70.151	NC	NC	NC	0.065	NC	-22.334	-21.560
2009q4	-97.388	-98.521	23.993	NC	NC	-100.000	1.659	-18.368	-18.044	-17.366
2010q1	-29.005	-29.005	-30.716	NC	NC	NC	3.447	-100.000	-16.467	-15.813
2010q2	88.378	88.378	268.036	NC	NC	NC	3.066	NC	67.095	63.559
2010q3	2657.691	4765.406	-69.309	NC	NC	NC	2.128	NC	-15.405	-14.838
2010q4	-97.105	-98.359	27.544	NC	NC	-100.000	3.407	-19.244	-9.987	-9.596

	TUSESANS	TVEHREG	TYAMNS	TYMNS	TYQMNS	TYSANS	TYWM	TYWMNS	UMICH	WM
2008q3	-22.292	NC	-99.999	-76.429	-78.692	-72.069	8.207	6.157	33.890	1.449
2008q4	-17.864	-100.000	259.667	32.600	-97.191	26.636	-7.052	64.649	44.755	-0.778
2009q1	-12.705	NC	804.318	-34.768	3859.719	-8.446	-2.402	-36.675	21.702	1.001
2009q2	63.234	NC	150167.304	252.675	260.468	138.182	-4.524	-15.330	10.345	1.854
2009q3	-21.560	NC	-99.998	-73.412	-80.212	-67.276	6.200	4.206	4.714	2.228
2009q4	-17.366	-100.000	326.489	33.251	-98.198	32.003	-2.532	72.633	-0.686	2.076
2010q1	-15.813	NC	586.329	-35.805	6743.273	-4.405	0.609	-34.721	-3.832	1.774
2010q2	63.559	NC	91854.883	243.110	261.903	121.074	-0.680	-11.922	-7.991	1.388
2010q3	-14.838	NC	-99.996	-69.888	-81.253	-63.090	8.230	6.197	-4.099	1.506
2010q4	-9.596	-100.000	320.627	50.562	-98.655	33.972	-1.552	74.369	-6.428	1.396

	WSGM	WSM	WSPM	WUS	YA	YAFDC	YDM	YDM824	YDM824AJ	YDMADJ
2008q3	7.761	1.613	0.531	2.746	0.562	3.802	-5.066	-12.074	-12.095	-5.089
2008q4	-4.569	-1.764	-1.241	2.644	2.362	-28.280	-0.290	3.915	3.906	-0.298
2009q1	2.042	-3.212	-4.148	2.489	56.942	-5.276	5.950	6.149	6.149	5.950
2009q2	1.896	-0.829	-1.327	2.310	3.417	-3.562	1.233	-0.318	-0.318	1.233
2009q3	2.028	-0.127	-0.526	2.002	2.464	17.822	-4.568	-6.262	-6.262	-4.568
2009q4	2.023	2.638	2.754	1.424	0.356	-15.691	1.255	-1.044	-1.044	1.255
2010q1	3.574	-0.508	-1.261	1.122	-1.967	-0.418	4.253	1.774	1.774	4.253
2010q2	6.513	2.748	2.045	0.892	-2.084	-0.703	1.827	-0.692	-0.692	1.827
2010q3	-2.026	1.655	2.373	0.846	-1.381	19.710	2.223	-0.294	-0.294	2.223
2010q4	0.961	3.494	3.980	0.924	1.350	-14.960	4.094	1.534	1.534	4.094

	YENTM	YENTUS	YOLM	YPADJM	YPERM	YPERM824	YPM	YPM824	YPRM	YPRUS
2008q3	2.140	1.119	0.919	2.271	2.724	-1.352	0.270	-7.132	5.824	4.626
2008q4	3.047	4.238	-2.146	-1.184	2.065	0.128	0.575	4.816	-0.778	1.391
2009q1	-0.238	-0.086	-0.445	-2.236	3.015	1.512	1.053	1.243	-1.567	-1.062
2009q2	2.168	2.275	-1.142	-1.080	2.732	1.370	0.052	-1.481	-3.809	-3.317
2009q3	6.237	6.313	-0.605	-0.860	0.701	-0.659	-1.367	-3.118	-7.519	-7.048
2009q4	5.739	5.842	1.180	0.757	-0.158	-1.624	1.130	-1.165	-8.886	-8.423
2010q1	5.031	5.159	2.560	-0.578	1.387	0.085	0.698	-1.696	-6.884	-6.410
2010q2	5.196	5.334	2.338	2.173	1.624	-0.392	1.916	-0.605	-1.993	-1.490
2010q3	5.382	5.529	1.805	2.835	1.488	-0.819	2.602	0.076	6.677	7.229
2010q4	5.338	5.498	1.369	4.400	2.215	-0.223	4.255	1.691	10.088	10.659

	YQ	YTM824	YTRM	YUCTRM
2008q3	4.498	-93.088	-9.215	333.412
2008q4	0.567	-99.999	8.001	50.341
2009q1	-1.094	NA	18.027	2.558
2009q2	-1.701	-86.679	5.051	-4.944
2009q3	-2.714	153.834	-3.044	-3.425
2009q4	-3.674	-55.582	3.080	-1.486
2010q1	-2.506	-98.068	7.890	-1.064
2010q2	0.731	188.025	1.266	-36.012
2010q3	6.171	-87.846	1.367	-39.586
2010q4	8.223	173.264	3.246	-3.191