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A Review Of Business Cycle Theory And Forecast Of The Current Business Cycle

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ABSTRACT

As the business cycle fluctuates, the U.S. economy may face increased unemployment in the case of an economic downturn or increased inflation in the stage of an expansion. Therefore, the study of business cycles is important in determining the current and future condition of the economy as a whole. This study seeks to expand the current body of knowledge of the business cycle by combining the history of economic theory of "Veblen", "Marx", "Schumpterer", "Friedman", "Keynes", "Minsky", and "Sherman" with the diffusion index popularized by "Valentine and Dauten" (1983). The purpose of this study are two-folds: first is to review the theoretical framework of the history of economic thoughts of business cycle and the methodology of diffusion index; second is to use these economic theories and the technique of diffusion index to forecast the strength and direction of the business cycle of the US economy. The results of this study indicate that it is possible to derive an accurate forecast of the strength and direction of the business cycle by combining economic theories and the technique of diffusion index.

Keywords: Forecasting; Economic activity; Business Cycle; Diffusion Index

INTRODUCTION

Historically, the term "Business Cycle" has been used to describe the up and down fluctuations in the aggregate economy (Real – GDP) as it moves through time. At the beginning of the business cycle, the upward forces (variables) move the cycle in an upward direction. As the cycle continues, this upward movement strengthens as additional variables start to join the forces to move the cycle in the same direction. These forces have a cumulative effect on the cycle, moving it higher and higher until the cycle reaches the peak and are then replaced by forces that move the cycle in the opposite (downward) direction. These downward forces gradually build up until they reach a point of maximum development. At that point, the business cycle reaches its trough. The downward forces then again give way to opposite forces to start a new business cycle. Thus the business cycle is the continuous movement of expansion and contraction caused by the movements of cumulative variables (forces) (McConnell and Brue, 2008).

The crisis or the downturn takes place quickly and violently, due primarily to the sudden and violent changes in business and individual expectations. An expansion, however, takes place over time. Keynes (1964) proposed that this increase is gradual because it is the return of confidence in the economy that brings about the economic expansion. Keynes (1964) proposed that an interval of time must usually elapse before a recovery can begin. Thus the crisis may be violent and abrupt, but the expansion is slow to occur.

It is important to study these fluctuations in the economy because these fluctuations affect prices, wages, and the level of employment. Government, business and individuals need to study business cycles to forecast and prepare themselves for the inevitable up and down in the aggregate economy. This study intends to conduct research on current business cycle.

The purpose of this study is twofold: the first is to review the theoretical framework of the business cycle, and second to predict the position and direction of the current business cycle.

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The approach used in this study is both theoretical and empirical. First a review of the theoretical literature including Thorstein Veblen, Karl Marx, Joseph Schumpeter, Milton Friedman, John Keynes, Hyman Minsky, and Howard Sherman. Variables from the literature review will be identified and used in a diffusion index to determine the position and direction of the current and future business cycle, (real GDP).

LITERATURE REVIEW

Veblen

Thorstein Veblen (1904) develops his analysis of the business cycle in 1904. Veblens' (1904) theory is based on the effects of the rate of profit and on the extension of credit. Veblen (1904) defined two types of credit, deferred payments and loans: (1) deferred payments are the purchase and sale of goods and services on account (current liabilities); (2) loans or debt-notes, stock shares, interest-bearing securities, deposits, and call loans are the funding borrowed by business for operations and expansion (long-term liabilities).

According to Veblen (1904), credit is used in business expansion, and the credit and expansion spread throughout the economy. During prosperity, two things happen to fuel the economy: rate of profits increases and expectations about the future profits rise. This period of prosperity eventually leads to a point of an over-expansion of credit and a declining of profits, forcing a liquidation of the expanded credit. Veblen (1904) proposes that recession is the period of falling prices, forced sales, liquidation, and a shrinkage of values.

Marx

Karl Marx (1936) proposed that "human labor creates value but is not in itself value; it becomes value only in its congealed state when embodied in the form of some object" (Marx, 1936). Marx's (1936) believed that value is the labor involved in producing a product, but the exchange (selling) of commodities created no value. The difference between the labor value of a commodity and the price of a commodity constitutes a surplus value: the amount of profit extracted by the capitalist from workers. Because of the extracted surplus value (profits) workers are left with only a subsistence wage and with an insufficient amount of money to buy their own production. Accordingly, goods pile up, and stagnation sets in. Marx (1936) proposed that the fundamental cause of a recession is the exploitation of the workers by the owners reducing the aggregate demand and causing a recession.

Schumpeter

In 1939 Joseph Schumpeter proposed that innovations generate business cycles. Innovations can be a new technique, new materials, or new process of doing business. Schumpeter (1939) proposed that the economy is inherently stable or in a state of equilibrium. When a new innovation is introduced, it causes a surge in investment that continues to the point where the innovation has its full effect on the economy. At this point, there will be an over investment in production of goods and services from that innovation, causing a reduction in the aggregate price level, a reduction in profits, and a downturn in the aggregate economy (recession). A recession continues until a new equilibrium point is reached.

Friedman

Milton Friedman (1953) believed that the business cycle is caused by external shocks compounded by the fact that the government tries to compensate for the external shock. Friedman (1953) proposed that monetary and fiscal policy all have lags and that the government's decision to act with monetary and fiscal policy to stabilize the economy maybe an incorrect decision causing the business cycle to fluctuate.

For example, a sudden tightening of the money supply to curb inflation will have negative effect on business investment causing a recession. Friedman's (1953) argument is that the economy is and has always been inherently stable and that it is self-correcting to a point of equilibrium. In Friedman's (1953) view, since the economy is self-correcting, all that policy makers need to do is to set rules for government spending and the money supply on an annual basis. Policy makers should then stick with their rules, leaving no need for expansionary or contractionary monetary and fiscal policies.

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Keynes

John Keynes (1964) proposed that the fluctuations in the business cycle result from changes in the marginal efficiency of capital (MEC). Keynes (1964) proposed that the marginal efficiency of capital is the primary determinant of the business cycle. The Marginal Efficiency of Capital (MEC) includes the prospective yield (interest rate) and businesses expectations about the future.

Though the rate of interest is a strong factor in the marginal efficiency of capital, expectations are the strongest factor. Burkett (1987) interpreted Keynes' MEC to be a state of fluctuation, because the future of business is unknown and investors' expectations of the future are subject to change. Thus the marginal efficiency of capital (MEC) cannot be specifically calculated due to fluctuations in business expectations therefore the business cycle must be determined by other factors in addition to the primary factor of marginal efficiency of capital MEC (Burkett, 1987).

Keynes (1964) proposed that the business cycle also responds to changes in other short-term variables of the economic system. The short-term variables identified by Keynes (1964) include employment, wage rate, consumer prices, personal consumption, money supply, interest rate, resource price, corporate profits, disposable personal income, investments, and personal savings.

Minsky

Hyman Minsky (1975) proposed that it is the amount of debt financing that ultimately leads to a downturn in the business cycle. If businesses want to invest, they must either have money or they must be able to practice debt financing. Businesses can acquire more assets by selling bonds (debt financing). But to do so, businesses must assure a balance between the yield on the asset (profits) and the cost of debt. In purchasing an asset, the firm is "betting that the situation will be such that the cash commitments can be met; it is estimating that the odds in an uncertain future are favorable" (Minsky, 1975).

Businesses borrow money based on their expectations about the future of their business. Businesses borrow little at the beginning of a boom and continue to increase their borrowing as the boom expands. This process leads businesses farther and farther into debt until a point is reached that the borrowing businesses' cash liabilities (debt) begin to increase faster than income. This leads to a collapse in investment spending and a decline in economic activity. Minsky (1975) proposed that it is the over borrowing by business that cause the business cycle.

Sherman

Howard Shermans' (1989) theory the *General Profit Squeeze* defines profit in the micro level as revenue minus cost. Sherman (1989) proposed that the later period of the business expansion demand slows down, costs of raw material rise faster than prices, and the aggregate economy slows. Therefore Sherman (1989) proposed that the downturn is caused by a combination of slowing demand and a more rapid increase in costs (producer prices), which squeezes corporate profits.

Once the economy is in recession, both money-wages and profits drop, but profits drop faster than money-wages. As a result, consumer demand falls, but investment demand falls more rapidly. As the fall in investment and consumer demand takes place, government revenues fall while government spending automatically increases and consequently government deficit spending increases. As demand falls businesses realize their mistakes and start laying off or firing the less productive workers. Productivity begins to rise, however, profits and investment continue to fall but at a slower pace. Credit also continues to fall and brings a rapid decline in the interest rate. The decline in the interest rate reduces the cost of debt and in turn increases the profit margin. As the profit margin continues to increase, a new expansion gets under way. The expansion of the profit margin ushers in a new revival and the cycle begins again. Thus the main thrust of business cycles is the squeeze of the profit margin (Sherman, 1989).

METHODOLOGY

Based on the above literature review, the following economic indicators have been determined to be important and will be selected in this study to predict the aggregate economic activity (business cycle): The level of employment, the wage rate (average hourly earnings per worker manufacturing), consumer prices (CPI-U--all items, all urban consumers 1982-84=100), personal consumption, M-1 (money supply seasonally adjusted), interest rate (yield on U.S. Government securities 3-month T-bill rate on new issue percent), resource price (PPI), corporate profits (manufacturing corporate profits after taxes), disposable personal income (money-wage), investments (gross private domestic investment), and personal savings (see Table 1).

Table 1 Literature and the Variables that affect GDP

Literature	Variables that affect GDP
Thorstein Veblen	Corporate Profits, resource prices, consumer prices, investments, and expectations of the future
Karl Marx	Wage rate, consumer prices, disposable personal income, and corporate profits
Joseph Schumpeter	Innovations
Milton Friedman	External shocks, money supply, and the interest rate
John Keynes	Expectations, employment, wage rate, consumer prices, personal consumption, money supply, interest rate, resource price, corporate profits, disposable personal income, investments, and personal savings
Hyman Minsky	Expectations, debt financing, and corporate profits
Howard Sherman	Resource price, corporate profit, and the money wage

Since economic indicators do not always move uniformly in the same direction throughout the phases of the business cycle, this study uses a diffusion index to compute the general overall movements of the economic indicators. The diffusion index measures the percentage of factors that are expanding in the same time period. It varies between 100% to zero: 100% indicates that all factors are expanding; zero means that all factors are falling; 50% implies that there is no change in the aggregate factors; a number between 50% and 100% shows that the aggregate factors is expanding at an increasing rate; a number between zero and 50 indicates that the aggregate factors is contracting at a decreasing rate. Accordingly a diffusion index can be used to gauge the strength and direction (expansion or contraction) of the forces at a time period. The diffusion index is a fast, simple, valuable way of forecasting the aggregate economy. The National Bureau of Economic Research currently uses a diffusion index to compute their business cycle indicators as well. Therefore, the diffusion index is used in this study to determine the current position or the current business cycle (Valentine and Dauten, 1983).

In this study the percentage change in an economic indicator from quarter to quarter is determined using the flowing formula $((Q_2 - Q_1 / Q_1) *100)$. For example, the level of employment in the first quarter of 2009 was 141,603.3 (Q_1), the employment for the second quarter of 2009 was 140,459.3 percent (Q_2), thus using the above formula we get (((140,459.3 – 141,603.3) / 141,603.3) * 100) = -0.808. The percentage change is rounded to the nearest thousandth of a percent. Since employment is positively related to GDP, the direction of the percentage change in employment in Table 1 is coded as expanding "E". Any change in a particular economic indicator of less than a thousandth of a percent is classified as a stable indicator and coded with the letter "O". The letter "C" denotes a contraction in an individual indicator. Having indicated the directional movement of each economic indicator, the number of expanding (E), contracting (C), and stable (O) indicators are summed (see Table 2).

Once the expansions and contractions are summed, a simple percentage is computed. The percentage of expansions are then related to the diffusion index stage (see Figure 1), and plotted on the diffusion index graph (see Figure 1). Thus the plotted point in the diffusion index could be used to find the corresponding point in the business cycle forecast graph to determine the expected or forecasted position of the aggregate economy (Real-GDP) (see Figure 1). Once the forecasted business cycle is identified and the direction of the economy is known, analysts can focus on controlling the business cycle by adopting monetary and fiscal policies.

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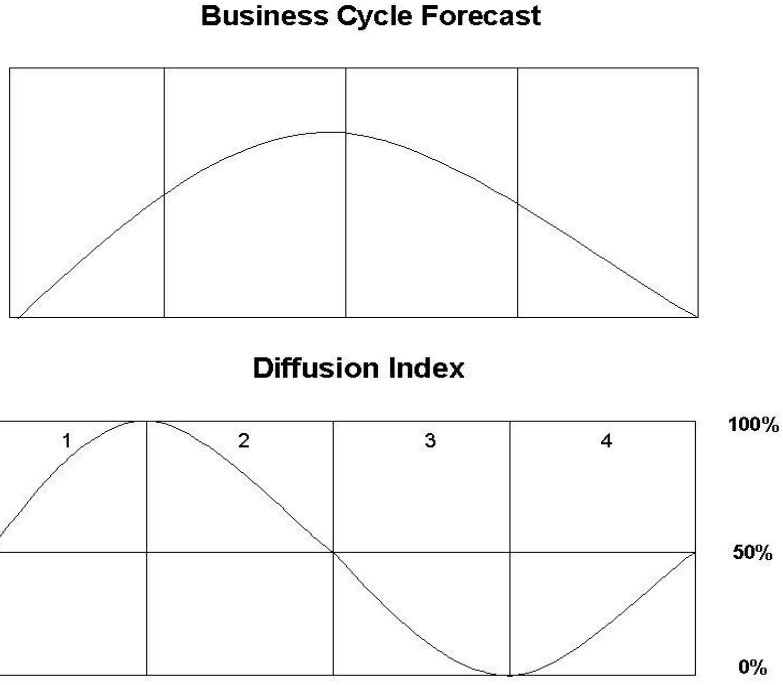
Table 2 The Change and Direction of Economic Indicators

	2009Q2	Q3	Q4
Employment	C	C	C
Personal Savings	E	E	E
Disposable Income	E	C	E
Investment	C	E	E
Avg. Hourly Earnings	O	E	E
Consumer Price Index (CPI)	C	E	E
Personal Consumption	E	E	E
Producer Price Index (PPI)	E	E	E
Money Supply (M1)	E	E	E
Interest Rate	O	0	C
Corporate Profit	E	E	N/A
Total number of indicators expanding	6	8	8
Total number of indicators stable	2	1	0
Total number of indicators contracting	3	2	2
Percentage of expanding indicators	55	73	80
Percentage of stable indicators	18	9	0
Percentage of contracting indicators	27	9	20
Diffusion Index (Stage)			

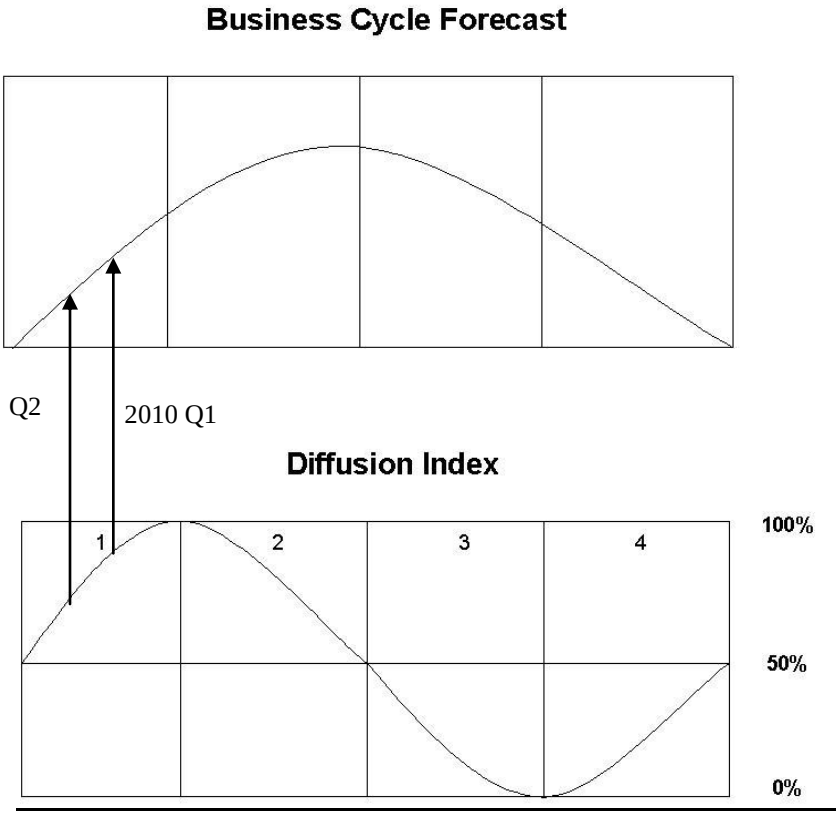


Stage	Diffusion Index	Implied Direction
1	Rising (50% - 100%)	Increasing at an increasing rate
2	Falling (100% - 50%)	Increasing at a decreasing rate
3	Falling (50% - 0%)	Declining at an increasing rate
4	Rising (0% - 50%)	Declining at a decreasing rate

Source: Valentine, L. M., & Dauten, C. A. (1983). *Business Cycles & Forecasting 6th Edition*, Cincinnati, Ohio: South-Western Publishing Co.

Figure 1 Business Cycle Calculation

RESULTS



Stage	Diffusion Index	Implied Direction
1	Rising (50% - 100%)	Increasing at an increasing rate
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3	Falling (50% - 0%)	Declining at an increasing rate
4	Rising (0% - 50%)	Declining at a decreasing rate

Source: Valentine, L. M., & Dauten, C. A. (1983). *Business Cycles & Forecasting 6th Edition*, Cincinnati, Ohio: South-Western Publishing Co.

Figure 2 Business Cycle Calculations

Figure 3 depicts Quarterly Real GDP experienced the trough of the recession in the second quarter of 2009. Since the second quarter of 2009, Real GDP has been slowly but steadily increasing. The business cycle indicators defined in the literature review were evaluated in Table 3, showing the change and direction of each of the economic indicators, and the percentage of total indicators that were expanding, contracting, or remaining stable. Table 3 also shows that in Q1 2010, 91% of the total economic indicators were expanding. Figure 2 explains that when 50% – 100% of economic indicators are expanding, the Diffusion Index is in stage 1. Tracing the points on the Diffusion index curve up to intersect the business cycle forecast curve determines the location and direction of the current aggregate economy (RGDP). For example, the second quarter of 2010, 80% of the total indicators were expanding, thus the Diffusion Index was in stage one tracing the point in diffusion index up to intersect the business cycle graph, showing that the business cycle was in the stage of expansion.

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Table 3 The Change and Direction of Economic Indicators

	2009Q2	Q3	Q4	2010Q1	Q2
Employment	E	C	C	E	E
Personal Savings	E	C	C	E	E
Disposable Income	E	C	E	E	E
Investment	C	E	E	E	E
Avg. Hourly Earnings	E	E	E	E	E
Consumer Price Index (CPI)	C	E	E	E	C
Personal Consumption	E	E	E	E	E
Producer Price Index (PPI)	E	E	E	E	C
Money Supply (M1)	E	E	E	E	E
Interest Rate	C	C	C	E	E
Corporate Profit	E	E	E	E	N/A
Total number of indicators expanding	8	7	8	10	8
Total number of indicators stable	0	0	0	0	0
Total number of indicators contracting	3	4	3	1	2
Percentage of expanding indicators	73	64	73	91	80
Percentage of stable indicators	0	0	0	0	0
Percentage of contracting indicators	27	36	27	9	20
Diffusion Index (Stage)	1	1	1	1	1

CONCLUSION

Table 4 Real GDP

	2009Q2	Q3	Q4	2010Q1	Q2
Real GDP	12,810.0	12,860.8	13,019.0	13,138.8	13,216.5
Percentage Change in real GDP	-0.901	0.395	1.215	0.912	0.588

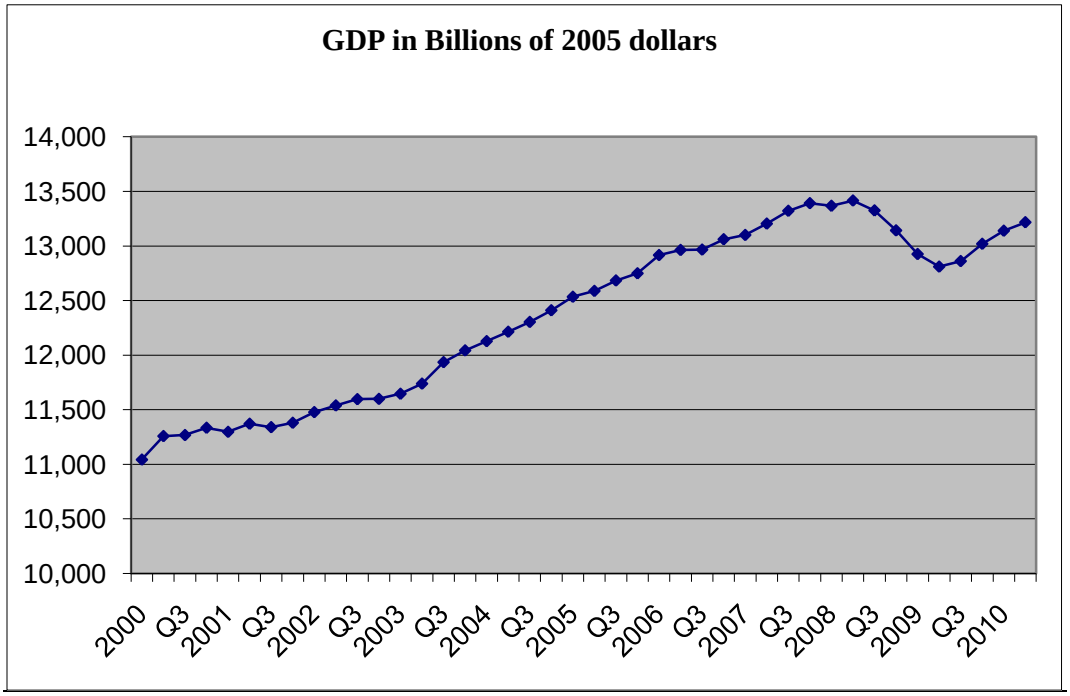

Figure 3 Quarterly Real GDP

Table 3 also shows that there was a decline in both the consumer prices and producer prices in Q2 2010, indicating a weakening of the expansion in the economy in Q2 2010 as compared to previous Q1 2010. The percentage growth in real GDP in Q2 2010 slowed to 0.588 (table4) but continued to be positive. Table 4 and Figure 3 reveal that RGDP has been expanding for the last four quarters (0.274, 1.616, 0.673, 0.588). Since the forecasted business cycle using the Diffusion Index flows well with the actual RGDP data, this supports the use of the Diffusion Index as a credible methodology for forecasting the current business cycle. Real GDP increased in Q2 2010, however, if more indicators turn negative, it is possible that the economy (RGDP) could see a double dip recession in the year to come.

In summary, this study reviewed the theoretical framework of the business cycle and Forecasted the position and direction of the current business cycle using the Diffusion Index. This study found that the Diffusion Index to be a useful tool in forecasting the location and direction of the current business cycle.

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APPENDIX 1

Table 3 Raw Data Collection

	2009 Jan	Feb	Mar	April	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2010 Jan	Feb	Mar	April	May	Jun
Real GDP			12832.6			12810.0			12860.8			13019.0			13138.8			13216.5
Employment	142221	141687	140854	140902	149438	140038	139817	139433	138768	138242	138242	137792	138333	138641	138905	139455	139420	139119
Personal Savings	614.2	545.8	604.6	720.9	915.9	743.8	671.6	568.2	630.5	583.1	617.4	647.5	644.1	610.3	609.0	681.5	713.9	725.9
Disposable Personal Income	10912.4	10856.2	10870.9	10989.1	11200.2	11083.5	11036.1	11053.4	11051.4	11061.5	11119.6	11183.9	11198.1	11213.2	11263.6	11321.3	11358.2	11363.3
Gross Private Domestic Investment			1529.5			1453.2			1494.5			1585.7			1690.2			1800.6
Average Hourly Earnings	18.43	18.47	18.52	18.53	18.55	18.57	18.62	18.69	18.71	18.78	18.80	18.85	18.90	18.92	18.90	18.95	19.00	19.00
Consumer Price Index (CPI)	212.174	213.007	212.714	212.671	212.876	114.459	214.469	215.428	215.791	216.357	216.859	217.224	217.587	217.591	217.729	217.579	217.224	217.965
Personal Consumption Expenditures	9920.8	9931.4	9886.7	9890.7	9907.2	9962.4	9983.1	10102.1	10037.0	10098.0	10128.2	10168.4	10182.8	10229.9	10279.7	10268.8	10277.4	10274.5
Producer Price Index (PPI)	171.2	170.9	169.6	170.6	170.6	173.7	171.6	174.1	173.3	173.6	176.2	177.1	179.4	178.5	180.0	179.8	179.3	178.4
Money Supply (M1)	1583.5	1574.0	1577.4	1608.5	1608.5	1646.2	1650.0	1648.5	1660.9	1676.2	1687.5	1696.6	1680.8	1714.8	1713.2	1701.7	1706.8	1722.7
Interest Rate	0.13	0.30	0.21	0.16	0.18	0.18	0.18	0.17	0.12	0.07	0.05	0.05	0.06	0.11	0.15	0.16	0.16	0.12
Corporate Profits			1182.7			1226.5			1358.9			1467.6			1584.5			

Table 4 Raw Data Processed into Quarterly Data

	Q2	Q3	Q4	2010Q1	Q2
Real GDP	-0.176	0.397	1.230	0.920	0.591
Employment	1.322	-2.872	-0.895	0.387	0.509
Personal Savings	34.909	-21.436	-1.192	0.833	13.840
Disposable Personal Income	1.940	-0.396	0.676	0.929	1.093
Gross Private Domestic Investment	-4.989	2.842	6.102	6.590	6.532
Average Hourly Earnings	0.415	0.665	0.732	0.514	0.406
Consumer Price Index (CPI)	-15.346	19.571	0.736	0.379	-0.021
Personal Consumption Expenditures	0.072	1.216	0.904	0.980	0.418
Producer Price Index (PPI)	0.625	0.796	1.522	2.088	-0.074
Money Supply (M1)	2.710	1.978	2.035	0.958	0.438
Interest Rate (3 month T bill)	-18.750	-9.615	-63.830	88.235	37.500
Corporate Profits	3.703	10.795	7.999	7.965	N/A

Table 5 Percentage Change Quarterly Economic Indicators

	2009Q1	Q2	Q3	Q4	2010Q1	Q2
Real GDP	12832.6	12810.0	12860.8	13019.0	13138.8	13216.5
Employment	141587.3	143459.3	139339.3	138092.0	138626.3	139331.3
Personal Savings	588.2	793.5	623.4	616.0	621.1	707.1
Disposable Personal Income	10879.8	11090.9	11047.0	11121.7	11225.0	11347.6
Gross Private Domestic Investment	1529.5	1453.2	1494.5	1585.7	1690.2	1800.6
Average Hourly Earnings	18.5	18.6	18.7	18.8	18.9	19.0
Consumer Price Index (CPI)	212.6	180.0	215.2	216.8	217.6	217.6
Personal Consumption Expenditures	9913.0	9920.1	10040.7	10131.5	10230.8	10273.6
Producer Price Index (PPI)	170.6	171.6	173.0	175.6	179.3	179.2
Money Supply (M1)	1578.3	1621.1	1653.1	1686.8	1702.9	1710.4
Interest Rate (3 month T bill)	0.2	0.2	0.2	0.1	0.1	0.1
Corporate Profits	1182.7	1226.5	1358.9	1467.6	1584.5	N/A

Table 6 The Change and Direction of Economic Indicators

	2009Q2	Q3	Q4	2010Q1	Q2
Employment	E	C	C	E	E
Personal Savings	E	C	C	E	E
Disposable Personal Income	E	C	E	E	E
Gross Private Domestic Investment	C	E	E	E	E
Average Hourly Earnings	E	E	E	E	E
Consumer Price Index (CPI)	C	E	E	E	C
Personal Consumption Expenditures	E	E	E	E	E
Producer Price Index (PPI)	E	E	E	E	C
Money Supply (M1)	E	E	E	E	E
Interest Rate (3 month T bill)	C	C	C	E	E
Corporate Profits	E	E	E	E	N/A
Total number of indicators expanding	8	7	8	10	8
Total number of indicators stable	0	0	0	0	0
Total number of indicators contracting	3	4	3	1	2
Percentage of expanding indicators	73	64	73	91	80
Percentage of stable indicators	0	0	0	0	0
Percentage of contracting indicators	27	36	27	9	20
Diffusion Index (Stage)					

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Real GDP Table 1.1.6. Real Gross Domestic Product, Chained Dollars [Billions of chained (2005) dollars] Seasonally adjusted at annual rates
http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=6&Freq=Qtr&FirstYear=2007&LastYear=2009

Bureau of Labor Statistics Table A-1. Employment status of the civilian population by sex and age [Numbers in thousands] Number Employed http://www.bls.gov/webapps/legacy/cpsatab1.htm

Personal Savings (BEA) Table 2.6 Personal Income and its Disposition, Monthly [Billions of dollars; months seasonally adjusted at annual rates]
http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=76&Freq=Month&FirstYear=2009&LastYear=2009

Disposable Personal Income (BEA) Table 2.6 Personal Income and its Disposition, Monthly [Billions of dollars; months seasonally adjusted at annual rates]
http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=76&Freq=Month&FirstYear=2009&LastYear=2009

Gross Domestic Investment Table 1.1.6. Real Gross Domestic Product, Chained Dollars [Billions of chained (2005) dollars] Seasonally adjusted at annual rates
http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=6&Freq=Qtr&FirstYear=2007&LastYear=2009

Average Hourly Earning of Production Workers Table B-8 Average hourly and weekly earnings of production and nonsupervisory employees on private nonfarm payrolls by industry sector, seasonally adjusted (total private, average hourly earnings of production and nonsupervisory employees) http://www.bls.gov/webapps/legacy/cesbtab8.htm

Bureau of Labor Statistics Table 2 http://www.bls.gov/cpi/#tables Consumer Price Index for All Urban Consumers (CPI-U): Seasonally adjusted U.S. city average, by expenditure category and commodity and service group (1982-84=100, unless otherwise noted)

Personal Consumption Expenditures (BEA) Table 2.6 Personal Income and its Disposition, Monthly [Billions of dollars; months seasonally adjusted at annual rates]
http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=76&Freq=Month&FirstYear=2009&LastYear=2009

Bureau of Labor Statistics Table 3 Producer price indexes by stage of processing, seasonally adjusted [1982 =100] (Finished goods) http://www.bls.gov/ppi/ppidr201003.pdf

Federal Reserve Statistical Release H.6 (508) Table 1 Money Stock Measures (Billions of Dollars) M1 seasonally adjusted http://www.federalreserve.gov/releases/h6/

Interest Rate "U.S. government securities/Treasury bills (secondary market)", Maturity, "3-month" Frequency, "Monthly", Description,"3-month Treasury bill secondary market rate discount basis", Note, "Annualized using a 360-day year or bank interest", Note, "On a discount basis."
http://www.federalreserve.gov/releases/h15/data/Monthly/H15_TB_M3.txt

Corporate Profits Table 11 Corporate Profits: Level and Percent Change (Billions of dollars) Seasonally adjusted at annual rates, corporate profits with inventory valuation and capital consumption adjustments
http://www.bea.gov/newsreleases/national/gdp/2009/gdp3q09_3rd.htm

NOTES

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