Economic Update
Canada – United States Business Association

Federal Reserve Bank of Chicago
February 1, 2013

Paul Traub
Declined $625B (Peak to Trough, -4.7%)
U.S. Real GDP and Components

Percent Change Q4 ‘11 to Q4 ’12
Seasonally Adjusted Annual Rates

Source: Author’s calculation using data from the BEA
GDP Output Gap

Actual versus Potential GDP

$ Billions

15,500
14,500
13,500
12,500
11,500
10,500

'00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15

Congressional Budget Office Projection
Output Gap -6.1%

Potential
Actual
Source: Author’s calculation using data from the BEA
U.S. Real GDP and Components

Index – Q1 of Recession = 100, Percent H/(L) than 100

Source: Author’s calculation using data from the BEA, average recovery based on all recessions 1960 through 2001.
U.S. Goods Trade with Canada

Billions of 2005$, Percent of Total

Imports (left axis)  Exports (left axis)  % of Total (right axis)
# U.S. Top Five Trading Partners

## Imports / Exports of Goods – Percent of Total

<table>
<thead>
<tr>
<th></th>
<th>Imports 2011</th>
<th>Imports 2012e</th>
<th>Exports 2011</th>
<th>Exports 2012e</th>
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<tbody>
<tr>
<td>China</td>
<td>18.1</td>
<td>18.6</td>
<td>Canada</td>
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<td>Canada</td>
<td>14.3</td>
<td>14.2</td>
<td>Mexico</td>
<td>13.4</td>
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<td>Mexico</td>
<td>11.9</td>
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<td>China</td>
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<td>6.4</td>
<td>Japan</td>
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<tr>
<td>Germany</td>
<td>4.5</td>
<td>4.7</td>
<td>United Kingdom</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Source: Author’s calculation based on data from U.S. Census and U.S. BEA
Global Outlook

IMF Forecast for Growth (October), Percent Change Yr/Yr

- Advanced Economies
- Emerging and Developing Economies
- World

<table>
<thead>
<tr>
<th>Year</th>
<th>Advanced Economies</th>
<th>Emerging and Developing Economies</th>
<th>World</th>
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<tbody>
<tr>
<td>2010</td>
<td>3.0</td>
<td>7.0</td>
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<tr>
<td>2014</td>
<td>1.0</td>
<td>5.0</td>
<td>3.0</td>
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</table>
Fiscal Ledge

- Congress and President avoid the full fiscal cliff
  - Income tax cuts made permanent for “middle class”
  - Extended unemployment insurance continues
- However, significant fiscal consolidation has started
  - SS payroll tax up 2 percent points
  - Higher tax rates and deduction phase outs for higher income tax payers
  - New Medicare tax for high income wage earners
  - Possible spending cuts from sequestration or alternatives
  - Still significant uncertainty over debt ceiling and long-run debt sustainability policies
- Implies a significant headwind to growth for 2013
U.S. Real GDP

Percent Change Yr / Yr

Consensus of the Blue Chip by Month

Percent Change Yr / Yr

Apr '12
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan '13

2012
2013
2014
Domestic Investment
U.S. Gross Private Domestic Investment - Nonresidential

Billions Chained $2005, % Change Q/Q at SAAR

- Percent Change (Peak to Trough) -23.6%
- Q4 '09 $1,216
- Q1 '09 -28.9%
- Q4 '12 $1,506
- Q4 '07 $1,592

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Private Nonresidential Construction

Billions of Dollars – 3 MMA, S.A.A.R

$ Billions

Dec ’12
$296.0
U.S. Gross Private Domestic Investment - Residential

Billions Chained $2005, % Change Q/Q at SAAR

Percent Change (Peak to Trough) -59.0%

Q3 '05 $783.3
Q4 '12 $384.3
Q1 '09 -35.4%

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Home Prices

FHFA U.S. Home Price Index, Q1 2000 = 100

Source: St. Louis Federal Reserve Bank – Fred data base and FHFA
Total Homeowner Real Estate Equity – U.S.

Homeowner Equity at Market Value

$Trillions

Source: Federal Reserve Bank
Value of Structures – U.S.

Household structures replacement cost at current cost basis

Source: Federal Reserve Bank
Household Owner’s Equity
Percentage of Household Real Estate

Source: Federal Reserve Bank
U.S. Housing Starts and Building Permits

Thousands of Units Annualized, NSA

Starts
Permits

Thousands

2,500
2,200
2,000
1,500
1,200
1,000
750
500
250
0

'00  '01  '02  '03  '04  '05  '06  '07  '08  '09  '10  '11  '12

0909
954

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CPI – Ownership versus Rental - U.S.

Rent versus Owner Equivalency

Source: BLS
U.S. Consumer
Real Disposable Personal Income & Savings Rate

Percent Change Year/Year, Percent of DPI

Source: BEA
Personal Savings

Billions Chained $2005

Source: Author’s calculation using data from the BEA
30 Year Fixed Rate Mortgage

Average in the U.S.

Source: Federal Reserve Bank of St. Louis - FRED
Debt Service & Financial Obligation Ratios

Percent of Disposable Personal Income

Source: Federal Reserve Bank

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Inflation – PCE Price Index

Percent Change Yr / Yr

PCE - All Items
Dec ‘12
1.3%

PCE – Core
Dec ‘12
1.4%

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Employment Gains / Losses

Nonfarm Payroll – In Thousands

Thousands

-8,736 + 5,505 = -3,231

-8,736

Mar ’09

830

Jan ’12

157

2,103

2,170
U.S. Unemployment & Participation Rates

Percent – Seasonally Adjusted

Source: BLS
Households Net Worth

Trillions of Dollars, Q1 ’80 to Q1 ’12

Source: Federal Reserve Z.1 Statistical Release, Table B100, Households and Nonprofit Organizations
Consumer Sentiment

University of Michigan

Source: Thomson Reuters / University of Michigan
U.S. Light Vehicle Sales

SAAR and Annual Sales

Source: Ward’s Automotive and BEA

Blue Chip Consensus

Cash for Clunkers
Aug '09

Dec '12

Source: Federal Reserve Bank of Chicago
Economic Projections of FOMC
F.O.M.C Statement

January 30, 2012

1. Information since the F.O.M.C. met in December suggests that growth in economic activity paused in recent months, in large part because of weather-related disruptions and other transitory factors.

2. Employment has continued to expand at a moderate pace but the unemployment rate remains elevated.

3. Household spending and business fixed investment advanced, and the housing sector has shown further improvement.

4. Inflation has remained low, apart from temporary variations that largely reflect fluctuations in energy prices.

5. Longer-term inflation expectations have remained stable.
Appropriate Timing of Policy Firming

FOMC Members – December 2012 Forecast

Number of Participants

<table>
<thead>
<tr>
<th>Year</th>
<th>September Forecast</th>
<th>December Forecast</th>
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<tbody>
<tr>
<td>2013</td>
<td>3</td>
<td>2</td>
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- September Forecast
- December Forecast
Effective and Expected Federal Funds Rate

Monetary Policy Expectations

Effective Federal Funds Rate

Expected Federal Funds Rate

Percent

'07 '08 '09 '10 '11 '12 '13 '14 '15

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Thank You!

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