Old Dominion University
2013 National Economic Outlook

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www.odu.edu/forecasting
Presentation Outline

• 2012 Scorecard
• Current economic conditions
• Outlook for 2013
  – What are the likely sources for growth?
• Monetary Policy
• Downside Risks
• Upside risks
# 2012 Scorecard

<table>
<thead>
<tr>
<th>Category</th>
<th>2012 Forecast</th>
<th>2012 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Gross Domestic Product (GDP)</td>
<td>2.40%</td>
<td>2.26%</td>
</tr>
<tr>
<td>Employment</td>
<td>2.00%</td>
<td>1.38%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>7.9%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Consumer Price Index (CPI)</td>
<td>2.30%</td>
<td>1.74%</td>
</tr>
<tr>
<td>CPI – Core</td>
<td>2.10%</td>
<td>1.89%</td>
</tr>
<tr>
<td>3-month Treasury bill</td>
<td>0.50%</td>
<td>0.09%</td>
</tr>
<tr>
<td>10-year Treasury bond</td>
<td>1.90%</td>
<td>1.80%</td>
</tr>
<tr>
<td>30-year conventional mortgage</td>
<td>3.80%</td>
<td>3.66%</td>
</tr>
</tbody>
</table>
Potential and Actual (Real) Gross Domestic Product, 2000-2015

Billions of 2005 Dollars

Source: Bureau of Economic Analysis and Old Dominion University Economic Forecasting Project.
Growth in Real Gross Domestic Product (GDP), 2006:Q1 – 2012:Q4

Seasonally adjusted annualized rate *100

2012:Q4 is forecasted.

2012 Growth Rates:
Q1 = 2.0%
Q2 = 1.3%
Q3 = 3.1%
Q4 = 1.2%

Source: Bureau of Economic Analysis and Old Dominion University Economic Forecasting Project.
Where has GDP growth been coming from?

Last Four Quarters, seasonally adjusted annualized rate

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-1%</td>
<td>2.0%</td>
<td>-2%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Change in inventories</td>
<td>= 2.5%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Defense spending increased by 12.9%</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Nonresidential investment</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Residential investment</td>
<td>-2%</td>
<td>-1%</td>
<td>-1%</td>
<td>-1%</td>
</tr>
<tr>
<td>Change in inventories</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Exports</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
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<td>Exports</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Imports</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis and Old Dominion University Economic Forecasting Project.
Month-to-Month Change in US Total Nonfarm Employment

January 2004 – December 2012

Average monthly change 2004-2006: +184,000 jobs

Average last 12 months: +141,800
Average last 6 months: +159,700

Losing roughly 800,000 per month

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project.
US Unemployment Rate, January 2005 – December 2012

December 2012: 7.8%
Average from 1984-2008: 5.7%

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project.
Long-Term Unemployment, 1990-present

Of Total Unemployed, Percentage Unemployed for *27 Weeks or Longer*

- Peak: 45.5% (March 2011)
- Currently: 39.1%
- 4 consecutive months of decline

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project.
The 2007-2009 Recession in Perspective

% Decline in Total US Non-farm Payroll Employment from Pre-Recession Peak

Back to pre-recession peak around April 2015 (87 months)

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project
The 2007-2009 Recession Including Virginia and Hampton Roads

% Decline in Total US Non-farm Payroll Employment from Pre-Recession Peak

Pre-Recession Peak Dates:
US: January, 2008
Virginia: February, 2008
Hampton Roads: July, 2007

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project
Percentage of ‘Great Recession’ Job Losses Recovered, by State

As of December 2012

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project
CPI and CPI-Core, January 2002 – December 2012

12-Month Percentage change

Source: Bureau of Labor Statistics and Old Dominion University Economic Forecasting Project
## National Outlook for 2013

<table>
<thead>
<tr>
<th></th>
<th>2013 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Gross Domestic Product (GDP)</td>
<td>2.10%</td>
</tr>
<tr>
<td>Employment</td>
<td>1.15%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>7.6%</td>
</tr>
<tr>
<td>Consumer Price Index (CPI)</td>
<td>1.73%</td>
</tr>
<tr>
<td>CPI – Core</td>
<td>1.51%</td>
</tr>
<tr>
<td>3-month Treasury bill</td>
<td>0.20%</td>
</tr>
<tr>
<td>10-year Treasury bond</td>
<td>1.95%</td>
</tr>
<tr>
<td>30-year conventional mortgage</td>
<td>3.80%</td>
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</tbody>
</table>
What are the likely sources for growth?

- Gross Domestic Product (GDP) is comprised of 4 components:
  1. Consumption
  2. Investment
  3. Net exports
  4. Government
Consumption (or “Personal Consumption Expenditures”)

- Almost 71% of GDP
- Primarily driven by income, employment, wealth
- We expect consumption will continue to “limp along” in 2013
Real Disposable Income Per Person, 2000 – present

Source: Bureau of Economic Analysis.
New Delinquent Balances by Loan Type, 2003:Q1 – 2012:Q3

Nominal Home Price Growth in 2011 and 2012


9 consecutive months of positive growth

Source: Standard and Poor’s, FHFA, and Old Dominion University Forecasting Project.
Year-Over-Year Nominal Home Prices, 2011:Q3 - 2012:Q3

% Change in FHFA All Transactions Index (Seasonally Adjusted)

Source: FHFA and Old Dominion University Economic Forecasting Project
Number of Consumers with New Foreclosures and Bankruptcies

2003:Q1 – 2012:Q3

Thousands

Foreclosures

- Peaked: 2009:Q2 at 566,000
- Currently: 241,000

Bankruptcies

- Peaked: 2010:Q2 at 621,000
- Currently: 354,000


2012Q3 Total: $11.31 Trillion


Mortgage & Consumer Credit Debt to Disposable Income

Average 1980-2000: 72%
Average: 2001-present: 110%
Currently: 103%

Source: Board of Governors of the Federal Reserve and Bureau of Economic Analysis.
Investment (or “Private Fixed Investment”)

- Residential investment (2.5% of GDP)
  - Construction of single- and multi-family housing units

- Nonresidential investment (10% of GDP)
  - Firm purchases of structures, equipment, and software that are used in the production of goods and services

- Change in inventories (0.3% of GDP)

- Primarily driven by interest rates, expectations, and the availability of credit
Housing Starts: New Privately Owned Units, 1960 – present

Seasonally adjusted annual rate, 1960:Q1 – 2012:Q4

- Consecutive months below 800,000: 47
- Currently: 954,000

Thousands

Source: US Department of Commerce.
Commercial Bank Loan Delinquency Rates

2000:Q1 – 2012:Q3

<table>
<thead>
<tr>
<th>Type</th>
<th>Peak Rate</th>
<th>Currently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>4.4%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Consumer</td>
<td>4.9%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Mortgages</td>
<td>11.3%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>6.8%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Board of Governors and Old Dominion University Economic Forecasting Project.
Bank-Reported Lending Standards

Federal Reserve Senior Loan Officer Opinion Survey, 2001:Q1 to 2012:Q3

DEMAND over the last 6 months:
- Traditional mortgages → up 5 months
- Non-traditional mortgages → up 4 months
- Auto loans → up 6 months
- Commercial → up 4 months

Harder to obtain loans

Easier to obtain loans

Source: Federal Reserve Board of Governors and Old Dominion University Economic Forecasting Project.

As a percentage of GDP

Source: Bureau of Economic Analysis and Old Dominion University Economic Forecasting Project.

As a percentage of GDP

Current cash holdings:
Dollar amount = $1.7 trillion
As a share of GDP = 11%

Source: Federal Reserve Board of Governors and Old Dominion University Economic Forecasting Project.
Limping Out of 2012?

October 2012 to December 2012
Conference Board = -10.9%
Small Business = -5.4%

Sources: Conference Board, National Federal of Independent Business, and Old Dominion University Economic Forecasting Project.
Net Exports (or “exports less imports”)  

- Primarily driven by domestic economic conditions, economic conditions of our trading partners, and exchange rates

### Top Trading Partners in Goods, 2012 (through November)

<table>
<thead>
<tr>
<th>Country</th>
<th>Exports (billions)</th>
<th>Imports (billions)</th>
<th>Percent of Total Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>270.1</td>
<td>298.4</td>
<td>16.2%</td>
</tr>
<tr>
<td>China</td>
<td>100.2</td>
<td>390.8</td>
<td>14.0%</td>
</tr>
<tr>
<td>Mexico</td>
<td>199.9</td>
<td>257.3</td>
<td>13.0%</td>
</tr>
<tr>
<td>Japan</td>
<td>64.0</td>
<td>134.6</td>
<td>5.7%</td>
</tr>
<tr>
<td>Germany</td>
<td>45.0</td>
<td>99.3</td>
<td>4.1%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>50.8</td>
<td>50.6</td>
<td>2.9%</td>
</tr>
<tr>
<td>South Korea</td>
<td>38.9</td>
<td>54.3</td>
<td>2.7%</td>
</tr>
<tr>
<td>Brazil</td>
<td>40.2</td>
<td>29.9</td>
<td>2.0%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>16.2</td>
<td>52.0</td>
<td>1.9%</td>
</tr>
<tr>
<td>France</td>
<td>28.4</td>
<td>38.3</td>
<td>1.9%</td>
</tr>
</tbody>
</table>
Outlook for Net Exports in 2013

• Slowing growth around the world
  – China, Japan, India, Latin America

• Reasons to be concerned about Europe
  – Recession/near-zero growth
  – Are they committed to their sovereign debt solutions?

• Canada and Mexico are performing about the same as US
  – No MAJOR stimulus likely
Government ("Government Consumption & Investment")

- State and local sector (12% of GDP)
  - 50% larger than Federal government
  - Good news: budgets are starting to grow (slowly)
  - Bad news: FY13 spending projected to be lower in 24 states than in 2008

- Federal government (8% of GDP)
  - Stimulus packages of 2008 and 2010 have been fully exhausted
  - The largest source of economic uncertainty?
    - American Taxpayer Relief Act of 2012
    - Debt limit
### American Taxpayer Relief Act of 2012 ("fiscal cliff" deal)

#### Major revenue changes

For individuals earning over $400,000 per year (couples over $450K):
- Marginal tax rates increased from 35% to 39.6%
- Long-term capital gains & dividends increased from 15% to 20%
- Top tax rate on estates over $5.12 million will be 40%
- AMT exemption is indexed to inflation
- Social Security payroll tax reduction expired
- Child tax credit, EITC, and education credits extended until 2017
- R&D and investment expensing allowances extended to 2013
American Taxpayer Relief Act of 2012 (‘‘fiscal cliff’’ deal)

<table>
<thead>
<tr>
<th>Major expenditure changes</th>
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</thead>
<tbody>
<tr>
<td>• Federal unemployment insurance extensions carry into 2013</td>
</tr>
<tr>
<td>• Extend Medicare physician payments (would have reduce payments by 27% in FY13)</td>
</tr>
</tbody>
</table>

Planned spending reductions of $109.4 billion in FY2013 (Sequestration)

- A one-time $54.7 billion in defense and $54.7 billion in non-defense
- Changed to a $42.5 billion reduction in FY2013 and a $12.2 reduction in FY2014
- Initial impact delayed until March 1, 2013
Federal Budget Deficits, 1970 – 2022

As a percentage of GDP

Sources: Congressional Budget Office and Old Dominion University Economic Forecasting Project.
Federal Revenues and Outlays, 1975 – 2035

As a percentage of GDP

Historical averages from 1950-2011:
Revenue = 18% of GDP
Spending = 20% of GDP

Sources: Congressional Budget Office and Old Dominion University Economic Forecasting Project.
Federal Entitlement Spending, 1975 – 2035

As a percentage of GDP

Sources: Congressional Budget Office and Old Dominion University Economic Forecasting Project.
Debt Held by the Public, 1975 – 2035

As a percentage of GDP

Sources: Congressional Budget Office and Old Dominion University Economic Forecasting Project.
What exactly is the statutory debt limit (or debt ceiling)?

• A limit on the total amount of federal debt that can be outstanding at any point in time
  – Began with the Second Liberty Bond Act of 1917
  – Office of Management & Budget: 76 authorized increases since 1962

• Total federal debt will increase if the government:
  – Issues debt to government accounts in exchange for their surpluses
    • Examples: Social Security Trust Fund, Medicare Trust Fund
    • Called “debt held by government accounts”
  – Sells debt to the public to finance current operations
    • Called “debt held by the public”
More on the debt limit

- Current debt limit is $16.2 trillion
  - Reached on December 31, 2012

- Current revenues fund roughly 75% of current spending

- Consequences to not raising the debt limit:
  - Federal spending will fall by 25% immediately (roughly 6% of GDP)
    - US economy will almost certainly enter a recession
  - Our default risk will increase
Monetary Policy

• Federal funds rate target: 0 to 0.25% (November 2008)
  – Expected to stay at this level while unemployment is above 6.5% and while inflation expectations are anchored
  – Announced in their December, 2012 meeting

• Non-traditional forms of monetary policy
  – Balance sheet has expanded from $1 trillion to nearly $3 trillion
Non-traditional Monetary Policy

• Quantitative easing
  – Large-scale purchases of mortgage-backed securities and other agency debt
    • QE3: 9/2012 - ?

• Maturity Extension Program and Reinvestment Policy
  – “Operation Twist” (ended in 2012)
  – Goal: extend the average maturity of the Fed’s Treasury portfolio

• Term deposit facility
  – Program to lower reserve balances of depository institutions

• Foreign currency swap lines
  – Currently extended until February 2014

Source: Board of Governors of the Federal Reserve.
Areas of Primary Concern with the Federal Reserve’s policies

- Is inflation going to be a short-term problem?
  - Rapid growth in Fed’s balance sheet
  - Excess capacity may help keep inflation in check

- How will the Fed “unwind” their balance sheet?
  - Too fast → could slow down the (sluggish) recovery
  - Too slow → inflation

- Are additional and/or new stimulus plans on the horizon?
Inflation expectations

10-Year Time Horizon, 2005:Q1 – 2012:Q4

Source: Federal Reserve Bank of St. Louis, FRED.
Expectations of Fed policy-firming

Survey Results of FOMC Members, December 11-12, 2012

Appropriate timing of policy firming

Downside risks

• Inflation picks up and the Federal Reserve is forced to act
• Recovery in housing slows/stops
• European recession/sovereign debt crisis turns for the worse
• Political uncertainty
• Regulatory uncertainty
  – Dodd-Frank
  – Affordable Care Act
Upside risks

• The Mayans were wrong!
• Energy prices
• Sovereign debt crisis abates
• Housing market stabilizes