Appendix 1: Materials used by Mr. Sack
Material for

**FOMC Presentation:**

*Financial Market Developments and Desk Operations*

Brian Sack

September 21, 2010
(1) Treasury Yields

(2) Implied Federal Funds Rate

(3) Probability of First Rate Hike

(4) Change in 1-Year Forward Rates*

(5) Probability of Balance Sheet Policy

(6) Forward Inflation Compensation (5-Year Ahead 5-Year Rate)
(7) US Equities

- S&P 500
- US Bank Index

Source: Bloomberg

(8) US Bank CDS*

*Average 5-year bank CDS

Source: Bloomberg

(9) LIBOR-OIS Spreads (3-Month Rates)*

- 3-Month Forward Spread
- Spot Spread

Source: Bloomberg

(10) ECB Financing as a Percentage of Bank Liabilities

Source: ECB and national central banks

(11) Euro Area Sovereign Yield Spread (2-Year Spread to German Debt)

Source: Bloomberg

(12) Currencies

Source: Bloomberg
(13) 10-Year Treasury Yield Around August FOMC Meeting

Source: Bloomberg

(14) Treasury Purchases Since August FOMC Meeting

Source: Federal Reserve Bank of New York

(15) Monthly Paydowns of Agency Debt and Agency MBS

Source: Federal Reserve Bank of New York

(16) Cumulative Paydowns of Agency Debt and Agency MBS

Source: Federal Reserve Bank of New York

(17) Percent Owned by the Federal Reserve

<table>
<thead>
<tr>
<th></th>
<th>Current Level</th>
<th>Over 1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBS*</td>
<td>24%</td>
<td>17%</td>
</tr>
<tr>
<td>Treasuries (under reinvestment)**</td>
<td>12%</td>
<td>15%</td>
</tr>
</tbody>
</table>

*Percent of total outstanding 30-year fixed MBS.
**Percent of total outstanding Treasury coupon securities.
Source: Federal Reserve Bank of New York

(18) Option-Adjusted MBS Spreads*

*Series reflect current coupon spreads prior to 6/1/10 and 4.0 coupon thereafter.
Source: Barclays Capital

Authorized for Public Release

Class II FOMC – Restricted FR
Appendix 2: Materials used by Mr. Stockton
## Private Housing Construction

(Thousands of units, seasonally adjusted annual rate, except where noted)

<table>
<thead>
<tr>
<th>Category</th>
<th>2009</th>
<th>2010</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q4</td>
<td>Q1</td>
<td>Q2r</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starts</td>
<td>554</td>
<td>565</td>
<td>617</td>
</tr>
<tr>
<td>Permits</td>
<td>583</td>
<td>626</td>
<td>655</td>
</tr>
<tr>
<td>Single-family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starts</td>
<td>445</td>
<td>488</td>
<td>524</td>
</tr>
<tr>
<td>Permits</td>
<td>441</td>
<td>491</td>
<td>525</td>
</tr>
<tr>
<td>Adjusted permits&lt;sup&gt;1&lt;/sup&gt;</td>
<td>454</td>
<td>504</td>
<td>538</td>
</tr>
<tr>
<td>Permits backlog&lt;sup&gt;2&lt;/sup&gt;</td>
<td>58</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Multifamily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starts</td>
<td>109</td>
<td>77</td>
<td>93</td>
</tr>
<tr>
<td>Permits</td>
<td>142</td>
<td>135</td>
<td>130</td>
</tr>
<tr>
<td>Adjusted permits&lt;sup&gt;1&lt;/sup&gt;</td>
<td>143</td>
<td>136</td>
<td>130</td>
</tr>
<tr>
<td>Permits backlog&lt;sup&gt;2&lt;/sup&gt;</td>
<td>40</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>Regional starts&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>62</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>Midwest</td>
<td>97</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>South</td>
<td>278</td>
<td>295</td>
<td>317</td>
</tr>
<tr>
<td>West</td>
<td>117</td>
<td>109</td>
<td>135</td>
</tr>
</tbody>
</table>

<sup>r</sup> revised  
<sup>p</sup> preliminary  
1. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.  
2. Number outstanding at end of period. Seasonally adjusted by staff. Excludes permits that have been cancelled, abandoned, expired, or revoked. Not at an annual rate.  
3. Sum of single-family and multifamily starts.  
Source: Census Bureau.

## Private Housing Starts and Permits

(Seasonally adjusted annual rate)

![Graph showing Private Housing Starts and Permits](image_url)

Note. Adjusted permits equal permit issuance plus total starts outside of permit-issuing areas.  
Source: Census Bureau.
Appendix 3: Materials used by Chairman Bernanke
Beveridge Curve: 1971-1978 (Quarterly Data)

Help wanted index (pct of emp)

Beveridge Curve: 1979-1987 (Quarterly Data)

Help wanted index (pct of emp)
Appendix 4: Materials used by Mr. English
Class I FOMC – Restricted Controlled (FR)

Material for
FOMC Briefing on Monetary Policy Alternatives

Bill English
September 21, 2010
AUGUST FOMC STATEMENT

1. Information received since the Federal Open Market Committee met in June indicates that the pace of recovery in output and employment has slowed in recent months. Household spending is increasing gradually, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising; however, investment in nonresidential structures continues to be weak and employers remain reluctant to add to payrolls. Housing starts remain at a depressed level. Bank lending has continued to contract. Nonetheless, the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, although the pace of economic recovery is likely to be more modest in the near term than had been anticipated.

2. Measures of underlying inflation have trended lower in recent quarters and, with substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to be subdued for some time.

3. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period.

4. To help support the economic recovery in a context of price stability, the Committee will keep constant the Federal Reserve's holdings of securities at their current level by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee will continue to roll over the Federal Reserve's holdings of Treasury securities as they mature.

5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to promote economic recovery and price stability.

---

1 The Open Market Desk will issue a technical note shortly after the statement providing operational details on how it will carry out these transactions.
**SEPTEMBER FOMC STATEMENT—ALTERNATIVE A1**

1. Information received since the Federal Open Market Committee met in June indicates that the pace of recovery in output and employment has slowed in recent months. Household spending is increasing, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising; however, investment in nonresidential structures continues to be weak, and employment remains reluctant to add to payrolls. Housing starts remain at a depressed level. Bank lending has continued to contract. Nonetheless, the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, although the pace of economic recovery is likely to be more modest in the near term than had been anticipated.

2. Measures of underlying inflation have trended lower in recent quarters. Underlying inflation is now running below the level of 2 percent or a bit less, as measured by the price index for personal consumption expenditures, that the Committee judges most consistent, over the longer run, with its mandate to promote maximum employment and price stability. In the current environment, disinflation is an impediment to economic recovery, and, with substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to be subdued for some time.

3. To help foster a stronger pace of economic recovery and to move underlying inflation closer, over time, to rates consistent with its mandate, the Committee will increase its total holdings of securities to approximately $2.5 trillion by purchasing an additional $500 billion of longer-term Treasury securities over the next six months. The Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. The Committee also will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To help support the economic recovery in a context of price stability, the Committee will keep constant the Federal Reserve's holdings of securities at their current level by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee will continue to roll over the Federal Reserve's holdings of Treasury securities as they mature.

4. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to promote economic recovery and price stability.
SEPTMBER FOMC STATEMENT—ALTERNATIVE A2

1. Information received since the Federal Open Market Committee met in June/August indicates confirms that the pace of recovery in output and employment has slowed in recent months. Household spending is increasing only gradually, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising; however, has slowed and investment in nonresidential structures continues to be weak, and Employers remain reluctant to add to payrolls. Housing starts remain at a depressed level. Bank lending has continued to contract. Nonetheless, The Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, although the pace of economic recovery is likely to be more modest in the near term than had been anticipated.

2. Measures of underlying inflation have trended lower in recent quarters, to levels below those the Committee judges most consistent, over the longer run, with its mandate to promote maximum employment and price stability. In the current environment, disinflation is an impediment to economic recovery, and, with substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to be subdued for some time.

3. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.

4. To help foster a stronger pace of economic recovery and to move underlying inflation closer, over time, to rates consistent with its mandate, the Committee will increase its total holdings of securities to approximately $2.5 trillion by purchasing an additional $500 billion of longer-term Treasury securities over the next six months. The Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. To help support the economic recovery in a context of price stability, the Committee will keep constant the Federal Reserve's holdings of securities at their current level by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee will continue to roll over the Federal Reserve's holdings of Treasury securities as they mature.

5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to promote economic recovery and price stability. The Committee will determine, each time it meets, whether an adjustment—either upward or downward—to its holdings of securities is needed to foster maximum employment and price stability.

— OR —

5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to promote economic recovery and price stability. The Committee will determine, each time it meets, whether an adjustment—either upward or downward—to its holdings of securities is needed to foster maximum employment and price stability.
SEPTMBER FOMC STATEMENT—ALTERNATIVE B

1. Information received since the Federal Open Market Committee met in June/August indicates that the pace of recovery in output and employment has slowed in recent months. Household spending is increasing gradually, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, however, while investment in nonresidential structures continues to be weak, and employers remain reluctant to add to payrolls. Housing starts remain at a depressed level. Bank lending has continued to contract, but at a reduced rate in recent months. Nonetheless, The Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, although the pace of economic recovery is likely to be more modest in the near term than had been anticipated.

2. Measures of underlying inflation have declined and are currently at trended lower in recent quarters, to levels somewhat below those the Committee judges most consistent, over the longer run, with its mandate to promote maximum employment and price stability. and With substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to remain subdued for some time before rising to levels the Committee considers consistent with its mandate.

3. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period. The Committee also will maintain its existing policy of reinvesting principal payments from its securities holdings.

4. To help support the economic recovery in a context of price stability, the Committee will keep constant the Federal Reserve's holdings of securities at their current level by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee will continue to roll over the Federal Reserve's holdings of Treasury securities as they mature.

4. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to promote economic recovery and price stability. is prepared to provide additional accommodation as needed to support the foster a stronger economic recovery and to help return inflation, over time, to levels consistent with its mandate.
1. Information received since the Federal Open Market Committee met in June/August indicates that the pace of economic recovery in output and employment has slowed in recent months. Household income and spending is improving gradually, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Manufacturing activity and business spending on equipment and software have risen; however, investment in nonresidential structures continues to be weak and employers remain reluctant to add to payrolls. Housing starts remain at a depressed level. Bank lending has continued to contract, but at a reduced rate in recent months. Measures of underlying inflation have trended lower in recent quarters, and longer-term inflation expectations have remained stable. Nonetheless, the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability. Although the pace of economic recovery is likely to be more modest in the near term, than had been anticipated, the Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.

2. Measures of underlying inflation have trended lower in recent quarters and, with substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to be subdued for some time.

2. The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. To help support the economic recovery in a context of price stability, For the time being, the Committee also will maintain its existing policy of reinvesting principal payments to keep constant the Federal Reserve’s holdings of securities at their current level, by reinvesting principal payments from agency debt and agency mortgage backed securities in longer term Treasury securities. The Committee will continue to roll over the Federal Reserve’s holdings of Treasury securities as they mature.

3. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to promote economic recovery and price stability.
August 2010 FOMC Directive

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to maintain the total face value of domestic securities held in the System Open Market Account at approximately $2 trillion by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve’s agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.
September 2010 FOMC Directive — Alternative A1

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to execute purchases of about $500 billion of longer-term Treasury securities by the end of March 2011 in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $2.5 trillion. The Committee also directs the Desk to maintain the total face value of domestic securities held in the System Open Market Account at approximately $2 trillion by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve’s agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.
September 2010 FOMC Directive — Alternative A2

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to execute purchases of about $500 billion of longer-term Treasury securities by the end of March 2011 in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $2.5 trillion. The Committee also directs the Desk to maintain the total face value of domestic securities held in the System Open Market Account at approximately $2 trillion by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve’s agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.
September 2010 FOMC Directive — Alternative B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to maintain the total face value of domestic securities held in the System Open Market Account at approximately $2 trillion by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve’s agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.
September 2010 FOMC Directive — Alternative C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to maintain the total face value of domestic securities held in the System Open Market Account at approximately $2 trillion by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The Committee directs the Desk to engage in dollar roll and coupon swap transactions as necessary to facilitate settlement of the Federal Reserve’s agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System’s balance sheet that could affect the attainment over time of the Committee’s objectives of maximum employment and price stability.