BEYOND THE NUMBERS

Dr. Richard Barkham

OCTOBER 2012
THE GLOBAL FINANCIAL CRISIS CONTINUES TO LINGER

The legacy of the Global Financial Crisis is still with us
SPARE CAPACITY IN THE OECD

OECD output gap, %

Source: OECD
US RECOVERY REMAINS SLUGGISH

Unemployment rate, %

Source: IHS Global Insight
ECB lending to ‘peripheral Europe’, € billion

Source: Oxford Economics/Haver Analytics
MONEY, MONEY, MONEY

Central Bank Balance
Sheets, Jan 2007 = 100

HOW DID WE GET HERE?
LONG DECLINE IN BOND RATES

Percent

Source IHS Global Insight
China’s Export Dominance

Change in share of world manufacturing output, %

Source: EcoWin
Chinese foreign currency reserves, US$ mn

Source: IHS Global Insight, US department of the Treasury
WORLD INTEREST RATES FALL

OECD Real Interest Rates, %

Source: IHS Global Insight
Household debt to GDP ratios, %

Source: OEF
CENTRAL BANK COMPLACENCY

The defeat of inflation was a major policy triumph

But central banks took their eyes off the ball:

- Cheap goods from China helped suppress inflation
- Cheap capital flooded into bond markets and money markets
- Weak regulation allowed excessive bank gearing and the emergence of a huge shadow banking industry

Monetary stimulus became a panacea:

- Causing a series of asset bubbles
- And the build up of a debt mountain
WHERE DOES THIS LEAVE US?
GLOBAL RECOVERY UNCERTAIN

Real GDP, quarterly percent change year over year

Source: IHS Global Insight
Global retail composite yield, %

Source: Brokers, Grosvenor Research
Global office composite yield, %

Source: Brokers, Grosvenor Research
THE CLOUDS DARKEN

Grosvenor world economic activity indicator, 0 is trend growth

Source: IHS Global Insight, Grosvenor Research, Google
# GLOBAL REAL ESTATE RETURNS

% Core Real Estate IRRs – per annum, next 5 years

<table>
<thead>
<tr>
<th>Sector</th>
<th>US</th>
<th>Canada</th>
<th>CE</th>
<th>UK</th>
<th>Japan</th>
<th>China</th>
<th>Australia</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>8.1%</td>
<td>5.1%</td>
<td>4.1%</td>
<td>5.0%</td>
<td>6.2%</td>
<td>7.3%</td>
<td>8.4%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Retail</td>
<td>8.6%</td>
<td>6.3%</td>
<td>5.2%</td>
<td>4.8%</td>
<td>-</td>
<td>7.3%</td>
<td>7.4%</td>
<td>6.6%</td>
</tr>
<tr>
<td>Residential</td>
<td>6.2%</td>
<td>-</td>
<td>-</td>
<td>4.0%</td>
<td>-</td>
<td>4.5%</td>
<td>-</td>
<td>5.0%</td>
</tr>
<tr>
<td>All</td>
<td>7.9%</td>
<td>5.7%</td>
<td>4.5%</td>
<td>4.7%</td>
<td>6.2%</td>
<td>6.4%</td>
<td>7.9%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Source: Grosvenor Research, 2012
BEYOND THE NUMBERS

Eileen Marrinan

OCTOBER 2012
Economic expansion in the US is slated to strengthen over the next five years.

Where will it focus?
A rotation is occurring in the sectors that drive economic growth.

Therefore, the metros/regions that outperform over the next decade will differ from those that led in the past.

## DRIVERS OF GROWTH

<table>
<thead>
<tr>
<th>Last Decade Sectors</th>
<th>Next Decade Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>Energy</td>
</tr>
<tr>
<td>Government</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Defense</td>
<td>Housing/Construction</td>
</tr>
<tr>
<td>Trade</td>
<td>Trade</td>
</tr>
<tr>
<td>Tech</td>
<td>Tech</td>
</tr>
<tr>
<td>Services</td>
<td>Services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last Decade Benefiting Locations</th>
<th>Next Decade Benefiting Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Plains</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td></td>
</tr>
<tr>
<td>Gulf Coast</td>
<td></td>
</tr>
<tr>
<td>East Coast</td>
<td>East Coast</td>
</tr>
<tr>
<td>West Coast</td>
<td>West Coast</td>
</tr>
</tbody>
</table>
ENERGY
Technological innovations have transformed the US energy industry.

Exploration and production of both oil and gas are expanding rapidly.
This trend has a way to run. The US is now the world’s low-cost producer of natural gas, by a considerable margin.
Lower labor and energy costs have increased the competitiveness of US manufacturing.

Both domestic and foreign firms are expanding, especially in the auto and durables industries.

Source: EcoWin
By contrast, Chinese wages are rising at double-digit rates. China’s one-child policy will soon translate into a shrinking labor force.
MANUFACTURING LOCATIONS

Seattle
Portland
Minneapolis
San Jose
Chicago
Detroit
Los Angeles
Ft. Worth
Atlanta
The housing market is finally coming back to life, with both home sales and prices on the upswing. Historically low interest rates and the Fed’s QE3 program will speed and strengthen its recovery.
HOUSING LOCATIONS

- Minneapolis
- Boston
- Oakland
- San Francisco
- Cincinnati
- Denver
- San Jose
- Los Angeles
- Orange County
- Austin
- Miami
- Washington, DC
Homebuilding is poised to expand after several years at a historically low level.
Commercial real estate will soon follow.

Multifamily - the most improved sector - is already picking up.
CONSTRUCTION LOCATIONS

Boston
Los Angeles
Denver
Chicago
Washington, DC
New York
Riverside
Orange County
Phoenix
Dallas
Atlanta
Houston

GROSVENOR
CONCLUSION

It’s not just the coasts anymore.

- As the economy re-balances, other regions and other metros are emerging as attractive prospects for real estate investment.
- Economic considerations are the first but not the sole criterion – characteristics of the investors themselves and of the markets also come into play.