How is the economy performing post-recovery?
Growth momentum picked up late 2010.... but output losses from the crisis persist.

Real GDP growth, QoQ, sa, percent

Actual and simulated GDP levels (sa), Q1 2008=100

GDP level without crisis (sa)
Actual GDP level (sa)

Note: No-crisis scenario assumes quarterly growth at averages of 2002-07.
Inflationary pressure is building.... but remains benign in regional context
Export recovery lagged the region’s decline in structural competitiveness?

 Goods export volume in USD, rebased to Jan 2007=100

E&E export value, sa, rebased to Jan 2008=100

Note: Export volume of Jan 2011 relative to Jan 07 (=100) in brackets
Foreign direct investment rebounded but remains well below potential.

Total FDI inflows, USD billion (UNCTAD data)

Actual and simulated average annual FDI inflows from 24 OECD economies during 2007-09, USD billion, OECD bilateral FDI data
What is the outlook for growth?
In the near term, output is expected to resume growth at pre-crisis rates.

Actual and forecast real GDP growth, year-on-year, percent

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Growth</th>
<th>Forecast Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>6.5</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>-1.7</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>2011f</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td>2012f</td>
<td>5.5</td>
<td></td>
</tr>
</tbody>
</table>
Over the medium term, the challenge is to escape the middle income trap....
….. and book further success in reducing poverty and inequality

Gini coefficient of inequality and poverty incidence

Share of national poor in 2009, percent

<table>
<thead>
<tr>
<th>State</th>
<th>Share of Poor in 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sabah</td>
<td>42.9</td>
</tr>
<tr>
<td>Sarawak</td>
<td>12.0</td>
</tr>
<tr>
<td>Kedah</td>
<td>9.8</td>
</tr>
<tr>
<td>Perak</td>
<td>8.4</td>
</tr>
<tr>
<td>Kelantan</td>
<td>6.3</td>
</tr>
<tr>
<td>Johor</td>
<td>4.2</td>
</tr>
<tr>
<td>Terengganu</td>
<td>3.8</td>
</tr>
<tr>
<td>Selangor</td>
<td>3.6</td>
</tr>
<tr>
<td>Pahang</td>
<td>3.2</td>
</tr>
<tr>
<td>P.Pinang</td>
<td>2.0</td>
</tr>
<tr>
<td>Perlis</td>
<td>1.3</td>
</tr>
<tr>
<td>W.P.KL</td>
<td>1.1</td>
</tr>
<tr>
<td>N.Sembilan</td>
<td>0.8</td>
</tr>
<tr>
<td>Melaka</td>
<td>0.4</td>
</tr>
<tr>
<td>W.P. Labuan</td>
<td>0.3</td>
</tr>
</tbody>
</table>
The reform agenda: progress has been made, but implementation needs to be accelerated

- **Assessment and articulation: significant progress**
  - Frank assessments
  - Bottom-up and private-sector led approaches
  - Sound structure of the reform agenda

- **Implementation: more needs to be done**
  - New frameworks to facilitate implementation
  - Positive sentiment on NKEA projects
  - Interviews suggest skepticism on NEM

- **Addressing cross-cutting issues is key, else:**
  - Project-based growth acceleration not sustained
  - Underlying competitiveness eroded
Whither the Brain Drain?
Why a report on brain drain?

An impediment to Vision 2020?
- Malaysia needs talent
- Talent seems to be leaving

A subject of debate and controversy
- Anecdotes are abundant
- Systematic studies are few

A topic that raises many questions
- How large is the brain drain?
- What is its economic impact?
- How can policymakers respond?
(1) How large is the brain drain?

• The Malaysian diaspora is estimated at one million as of 2010

• The diaspora is geographically concentrated and ethnically skewed

• About a third of all migration represents brain drain
Diaspora is estimated conservatively at 1 million, of which a third is brain drain.

Assumptions on Singapore nonresidents:

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Malaysian Share</th>
<th>Skilled Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>S1</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>S2</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>S3</td>
<td>45%</td>
<td>15%</td>
</tr>
<tr>
<td>S4</td>
<td>45%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Note: in thousands
Singapore’s nonresident population has grown rapidly

Evolution of population in Singapore, thousands

- **Nonresidents**
- **Permanent residents**
- **Citizens**

<table>
<thead>
<tr>
<th>Year</th>
<th>Nonresidents</th>
<th>Permanent residents</th>
<th>Citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>131</td>
<td>87</td>
<td>2,194</td>
</tr>
<tr>
<td>1990</td>
<td>311</td>
<td>112</td>
<td>2,623</td>
</tr>
<tr>
<td>2000</td>
<td>754</td>
<td>287</td>
<td>2,985</td>
</tr>
<tr>
<td>2010</td>
<td>1,305</td>
<td>541</td>
<td>3,230</td>
</tr>
</tbody>
</table>
Diaspora and brain drain are concentrated in just a few countries

Share in diaspora, by destination country

- Singapore: 57% Diaspora, 54% Brain drain
- Australia: 10% Diaspora, 15% Brain drain
- Brunei: 7% Diaspora, 3% Brain drain
- United Kingdom: 6% Diaspora, 5% Brain drain
- United States: 6% Diaspora, 10% Brain drain
- Canada: 2% Diaspora, 4% Brain drain
- New Zealand: 2% Diaspora, 2% Brain drain
The rate of brain drain remains elevated.....

Estimates of yearly growth in skilled-migrant population, 25+, 2000-2010

- Singapore: 6.0%
- New Zealand: 4.7%
- Brunei: 4.7%
- United States: 3.5%
- Australia: 2.9%
- United Kingdom: 2.6%
- Canada: 0.5%

Average: 4.2%
.... because migration to Singapore is becoming primarily skilled migration

Share of skilled migrants at destination in total migrants at destination, 25+, percent
(2) What is the economic impact of brain drain?

• Brain drain is aggravated by a narrow skill base and a lack of compensating inflows

• Brain drain imposes costs, but can also bring benefits

• Brain drain has likely contributed to an erosion of the already narrow skill base
Brain drain is intense relative to a narrow skill base

Gross emigration rate, percent, OECD destinations

- **Hong Kong**: 33% (30% in 1990, 33% in 2000)
- **Singapore**: 25% (14% in 1990, 25% in 2000)
- **Malaysia**: 26% (20% in 1990, 26% in 2000)
- **Korea**: 10% (8% in 1990, 10% in 2000)
- **China**: 4% (3% in 1990, 4% in 2000)
- **Japan**: 1.3% (1.2% in 1990)

5% global average

*adding Singapore*

MALAYSIA ECONOMIC MONITOR
Brain drain is not alleviated by compensating inflow of skilled migrants
Brain drain has likely eroded the quality of the skill base

Number of weeks to fill vacancy for skilled technician

Percent of managers considering skill set of local skilled production workers ‘poor’ or ‘very poor’.

- Brazil 2003: 8.8
- Malaysia 2007: 5.3
- Thailand 2007: 5.1
- Ireland 2005: 3.8
- Germany 2005: 3.7
- Korea 2005: 3.4
- India 2002: 3.2
- Russia 2005: 2.9
- Indonesia 2003: 1.6

Skills:
- IT
- English language proficiency
- Professional communication
- Creativity/innovation
- Technical/professional
- Problem solving
- Numerical
- Time management
- Leadership
- Adaptability
- Social
- Teamworking

Manufacturing: [Bars]
Services: [Bars]
(3) How can policies address brain drain?

• Brain drain is a wave to be ridden, not a tide to be turned
• It is a symptom of underlying factors, not a problem in itself
• To address the brain drain at its root, the productivity and inclusiveness agendas are key
• Targeted policies to facilitate the flow of talent can complement but not substitute
Brain drain is a symptom of underlying factors... productivity and inclusiveness are key.

Percent of respondents listing factor among top three concerns

- Career prospects: 66%
- Social injustice: 60%
- Compensation: 54%
- Study and stay on: 30%
- Safety and security: 28%
- Politics: 23%
- Study and return: 19%
- Livability: 12%

Source: Survey of the diaspora
Brain drain requires a comprehensive approach:
(a) Boosting productivity to raise wages....

Note: TFP = total factor productivity
....by addressing the supply side (improving education system)
....and addressing the demand side (promoting innovation and competition)

Share of firms considering ‘lack of appropriate source of finance’ as factor hampering innovation activities, according to importance

- 1990-94:
  - Not important or slightly important: 10%
  - Moderately important: 32%
  - Very important: 71%

- 1997-99:
  - Not important or slightly important: 19%
  - Moderately important: 30%
  - Very important: 38%

- 2000-01:
  - Not important or slightly important: 23%
  - Moderately important: 55%
  - Very important: 22%

- 2002-04:
  - Not important or slightly important: 24%
  - Moderately important: 47%
  - Very important: 29%

- 2005-08:
  - Not important or slightly important: 15%
  - Moderately important: 41%
  - Very important: 43%

Share of firms indicating ‘anti-competitive practices’ as ‘severe’ or ‘very severe’ problem, 2002-2007, percentage points

- Manufacturing firms:
  - 2002: 14
  - 2007: 16

- Services firms:
  - 2002: 14
  - 2007: 20
Brain drain requires a comprehensive approach:
(b) Enhancing inclusiveness to leverage on all talent

Share in Malaysian resident diaspora in Singapore, by ethnicity,

- Malay: 9% (2000), 6% (2010)
- Indian: 5% (2000), 5% (2010)

Share of Malaysian adults in US by language group, 2000

- Chinese: 61%
- English: 18%
- Malay: 10%
- Indian: 6%
- Other Asian: 2.3%
- Other: 2.2%
With enabling conditions in place, talent management and diaspora engagement can complement

Expatriates, thousands, by sector employed. Peninsular Malaysia only

- **Manufacturing**
- **Services**
- **Other**

<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing</th>
<th>Services</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>19</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>2005</td>
<td>15</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>2006</td>
<td>16</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>2007</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>2008</td>
<td>22</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>2009</td>
<td>22</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2010</td>
<td>21</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>
Thank you