Future State 2030:
Preparing Governments to Meet the Challenges of Coming Global Megatrends

May 19, 2014
A changing world
The global megatrends impacting governments into 2030

- Demographics
- Rise of the individual
- Enabling technology

Changes - global economy

- Economic interconnectedness
- Economic power shift
- Public debt

Changes - physical environment

- Climate change
- Resource stress
- Urbanization

Changes - individuals
Global megatrend #1: Demographics

The evidence of change

By 2030, the world’s population of people aged 65+ will double to 1 billion, raising the overall proportion of those 65 and over.

Today

- 8% of the population is 65+

2030

- 13% of the population is 65+

Globally, 15-24-year-olds make up 40% of the total unemployed population.²

90% of the global youth population resides in developing countries.⁵

A key contributing factor in population aging is declining birth rates, as measured by the crude birth rate per 1000 people.²

From 2011-30, pension spending is forecast to grow an additional:

- 1.3% of GDP in developed countries.³
- 2.2% of GDP in developing countries.³

1 million young people in India will enter the labor force every month for the next 20 years.⁶

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Global megatrend #2: The rise of the individual

The evidence of change

Middle class growth to 2030
Size of the global middle class as measured in millions of people

- 2.5%
- 6.8%
- 22.36%
- 54.66%
- 10.18%

Share of global middle class

- North America: 338 million in 2030
- Central & South America: 181 million in 2030
- Europe: 664 million in 2030
- Middle East & North Africa: 229 million in 2030
- Sub-Saharan Africa: 193 million in 2030
- Asia-Pacific: 3,229 million in 2030

75% of the global population has access to a mobile phone.
In some countries, more people have access to a mobile phone than to a bank account, electricity or clean water.10

34% of the world’s population will have access to the internet by 2030.11
Up from 34% in 2012.12

Half of the world’s population will have access to the internet by 2030.

Social media has accelerated recent uprisings in the developing world, playing a role in three main dynamics:14

- ORGANIZING PROTESTS
- SHAPING THE NARRATIVE
- PUTTING PRESSURE ON THE INTERNATIONAL COMMUNITY

While inequality in education and health are declining, income inequality is on the rise and

71%
of the world resides in nations where income inequality is increasing.13

According to the International Monetary Fund (IMF), just having as many women in the labor force as men could boost economic growth by:

- 5% in the US
- 9% in Japan
- 34% in Egypt

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Global megatrend #3: Enabling technology

The evidence of change

Global internet users in 2000: 360 million
Global internet users in 2012: 2.4 billion

Survival is less certain in a technologically-enabled world, creating major challenges for governments in the areas of economy and employment.

The global value of the ‘app economy’ is projected to be USD151 BILLION BY 2017.16

90% of the digital data in the world today was created in the last two years.17

Hon Hai/Foxconn (a major Chinese electronics manufacturer) plans to introduce 1 million robots into its manufacturing processes in just three years.18

Already, cyber attacks account for USD300 billion to USD1 trillion in global losses.20

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Global megatrend #4: Climate change

The evidence of change

Emission levels are too high – already 14% higher than the estimated emission levels required to meet the 2020 goal. By 2050, costs of extreme weather could reach up to 1% of world GDP per annum. Adapting to a 2°C warmer world by 2050 will require investments of USD70-USD100 BILLION PER YEAR.

For example, this would equal USD720 MILLION, based on the 2012 value of world GDP.

With a warming of 2-3°C:
- The Amazon rainforest could dry up.
- Irreversible melting of the Greenland ice sheet could occur.
- 20-50% of species would be at risk of extinction.

With a warming of 3-4°C, up to 200 MILLION PEOPLE could become permanently displaced due to rising sea levels, flooding and droughts.

= 50 million
Global megatrend #5: Resource stress

The population is growing and so is the middle class:

- **6.9bn** in 2010
- **8.3bn** in 2030

50% INCREASE in food production will likely be necessary to feed this more demanding population.⁴⁹

40% Estimated global gap between water supply and demand by 2030.⁴¹

About 1 billion more people will live in areas of water stress by 2030 in a business-as-usual scenario.⁴⁰

Both growing demands and unstable production patterns due to climate change will cause global food prices to double between 2010 and 2030.⁴²

The International Energy Agency projects an approximate 40% increase in global energy demand by 2030.⁴³

**DRIVEN BY**
- Economic growth
- Population growth
- Technological advancements

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Global megatrend #6: Urbanization

The evidence of change

60% of the world’s population will live in cities by 2030. Up from 50% in 2013.

80% of all urban growth in the next 20 years will take place in Africa and Asia.

Global infrastructure costs to keep pace with urbanization have been estimated at USD41 trillion between 2005 and 2030.

The top 600 cities by GDP growth:

- Are home to just over 20% of the world’s population.
- Generate USD34 trillion, or more than 50%, of global GDP.
- Are projected to nearly double their global GDP contribution to USD65 trillion by 2025.
Global megatrend #7: Economic interconnectedness

The evidence of change

Global trade as a share of GDP increased from\(^1\) to \(\approx 63\%)\) in 2011, with an expected growth rate of \(5\%\) annually until 2030.\(^2\)

Global Foreign Direct Investment stocks have quintupled as a share of GDP, from approximately \(6\%\) to \(30\%\)\(^3\), by 2030.\(^4\)

80\% of reciprocal trade agreements currently in force have been introduced since 1990.\(^5\)
Global megatrend #8: Economic power shift

The evidence of change

Developing countries will account for an estimated 57% of global GDP by 2030.28

Developing countries will be home to 440 of the world’s fastest growing cities, generating 47% of global GDP growth through 2025.29

Today, developing countries account for 37% of global trade.

‘South-South’ flows make up roughly half of that total.29

Over the next five years, acquisitions of foreign companies by Chinese firms are set to double, by 2020 they could quadruple.*

By 2030, China and India will account for 35% of world population

China

India

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Global megatrend #9: Public debt

The evidence of change

Public debt in developed countries has ballooned over the past half decade.²⁶

Net debt-to-GDP ratios (% of GDP) have increased:

- **46.3%** in 2007
- **78.1%** (Estimated) in 2013

If current trends continue, global levels of net public debt are set to reach:

**98%** of GDP by 2035.

Status quo projections for 2035 would see net debt rise to an average of:

- **133% of GDP in the Eurozone**
- **213% of GDP in the US**
- **386% of GDP in Japan**

By 2030, population aging will drive up health and pension spending by a projected:

- **4.4%** of GDP in developed countries
- **3.2%** of GDP in developing countries²⁷
Understanding interconnectedness

Demographics

Climate change

Resource Stress

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The consequences of megatrends on Public Financial Management
The consequences of megatrends on Public Financial Management: Changes – Individuals

Demographics
- An aging world
- Public pension systems under pressure
- Healthcare spending increases
- Youth bulges

Key Implications for PFM
- Cashflow implications
- Budget deficits
- Tax revenues
- Investments in education and youth programs

Rise of the individual
- Rising incomes, rising expectations
- Education enabling empowerment
- Increasingly connected populations
- Faster dissemination of information through social media accelerates action

Key Implications for PFM
- Inflation control
- Savings vs. consumer spending policies
- Transparent governance
- Investment in and use of social media

Enabling technology
- Big data
- The boundary between what is considered public and what is considered private is blurring
- Change of security and policing to focus on dealing with cyber crime
- Transportation transformations

Key Implications for PFM
- Data accuracy
- Data integrity and security
- Be prepared for the answers that might differ from public opinion or political direction
The consequences of megatrends on Public Financial Management: Changes – Global Economy

**Climate Change**
- Unpredictable, dramatic ecosystem impacts
- The challenge of global cooperation
- Pressure to adapt to ‘locked-in’ effects of global warming
- A greater role for cities

**Resource stress**
- Food and agricultural pressures
- Increased water demand
- Energy demand on the rise
- Increased risk of resource nationalism

**Urbanization**
- Urban growth driven by developing world
- Interrelationship between built environment and natural environment
- Large-scale urban infrastructure needs
- Urban poverty pressures including growing populations living in informal settlements

**Key Implications for PFM**
- Infrastructure protection and integrity
- Resource scarcity
- Pressure on natural resources
- Political influences
- Public opinion pressures

- Rule of law pressures
- Internal and regional micro-conflicts
- Regional trade influences and impact
- Population flow and distribution
- Economic distribution

- Infrastructure deficits
- Impact on productivity, both urban and rural
- Prioritization of investments in infrastructure and social programs

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The consequences of megatrends on Public Financial Management: Changes – Physical Environment

**Economic interconnectedness**
- Trade and investment continue to increase growth
- Increasingly complex trade and investment relationships
- Declining barriers to trade
- Greater risk for international (economic/financial) contagion events

**Economic power shift**
- The ‘global south’ as the engine for growth
- Emerging multi-polar world order
- Innovation as the source of sustaining growth
- Increased consumption base driving economic opportunities

**Public debt**
- Increasingly important international and intergovernmental fiscal relationships
- Increased exposure to global market risks
- Reduced capacity to address future international economic/fiscal financial shocks
- Limited potential to meet growing demand for new services

**Key Implications for PFM**
- Initiatives to attract FDI
- Trade policies
- Tax regime
- Governance and regulatory oversight of various sectors, e.g. financial services

- Ability to raise public debt
- Country rating
- Management of key metrics such as inflation, public debt levels and fiscal reserves

- Know your ‘markets’ and where expansion can occur
- International trade agreements
- Double tax treaties
- Use of technology to quickly modernize and attract investment
- Understanding future basis of economic drivers, e.g. more services driven

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Possible responses to the megatrends
The tools available to governments

When looking at *what* governments may need to change, they may choose from:

- Policy
- Regulation
- Programs

When looking at *how* governments may need to change, they may choose from:

- Strategies
- Structure
- Skills
What we found

How some governments need to change?

Strategies

- Long-term planning and scenario exercises
- Behavioral insights
- Outcomes and metrics
- Flexibility and “paradigm” thinking
- Technology adoption

Structures

- Internationally integrated
- Highly integrated
- Locally empowered
- Networked
- Flexible and adaptive

Skills

- International awareness
- Financial sophistication
- Systems thinking
- Effective stakeholder engagement
- Risk assessment and change management
Thank You

Website: www.kpmg.com/idas