

World in 2050

The shift in global economic power to the E7: challenges and opportunities

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Agenda

Short term picture: BRICs driving global growth in 2011-12

Long term economic growth model

Key results:

- Relative growth rates and size of economies by 2050
- Relative average income levels

China vs India

What might derail growth in the E7?

Implications for UK business: challenges and opportunities

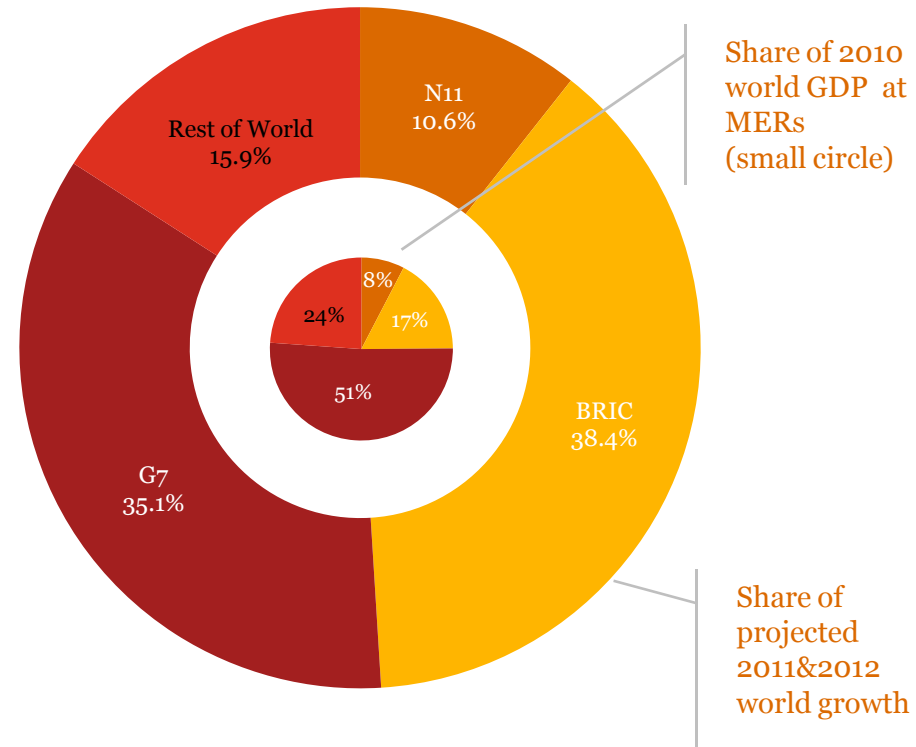
Summary

Q&A

Emerging economies driving global GDP growth in 2011-12

BRICs provide 38% of global growth in 2011-12, but only 17% of GDP

Share of world GDP and future GDP growth by country grouping



World in 2050 series of reports: country coverage

PwC's original 'World in 2050' study in 2006 covered the 17 largest economies in the world based on GDP at PPPs (World Bank estimates):

G7 plus Spain, Australia and South Korea

E7 economies

- BRICs (Brazil, Russia, India and China)
- Indonesia, Mexico and Turkey

Extended 2011 study: World Bank estimates were updated and growth estimates were adjusted to reflect the recent crisis. Vietnam, Nigeria, South Africa, Saudi Arabia and Argentina were also considered in the latest study.

GDP growth model structure

Each country modelled individually but with linkages via US productivity growth (the global technological frontier)

Growth driven by:

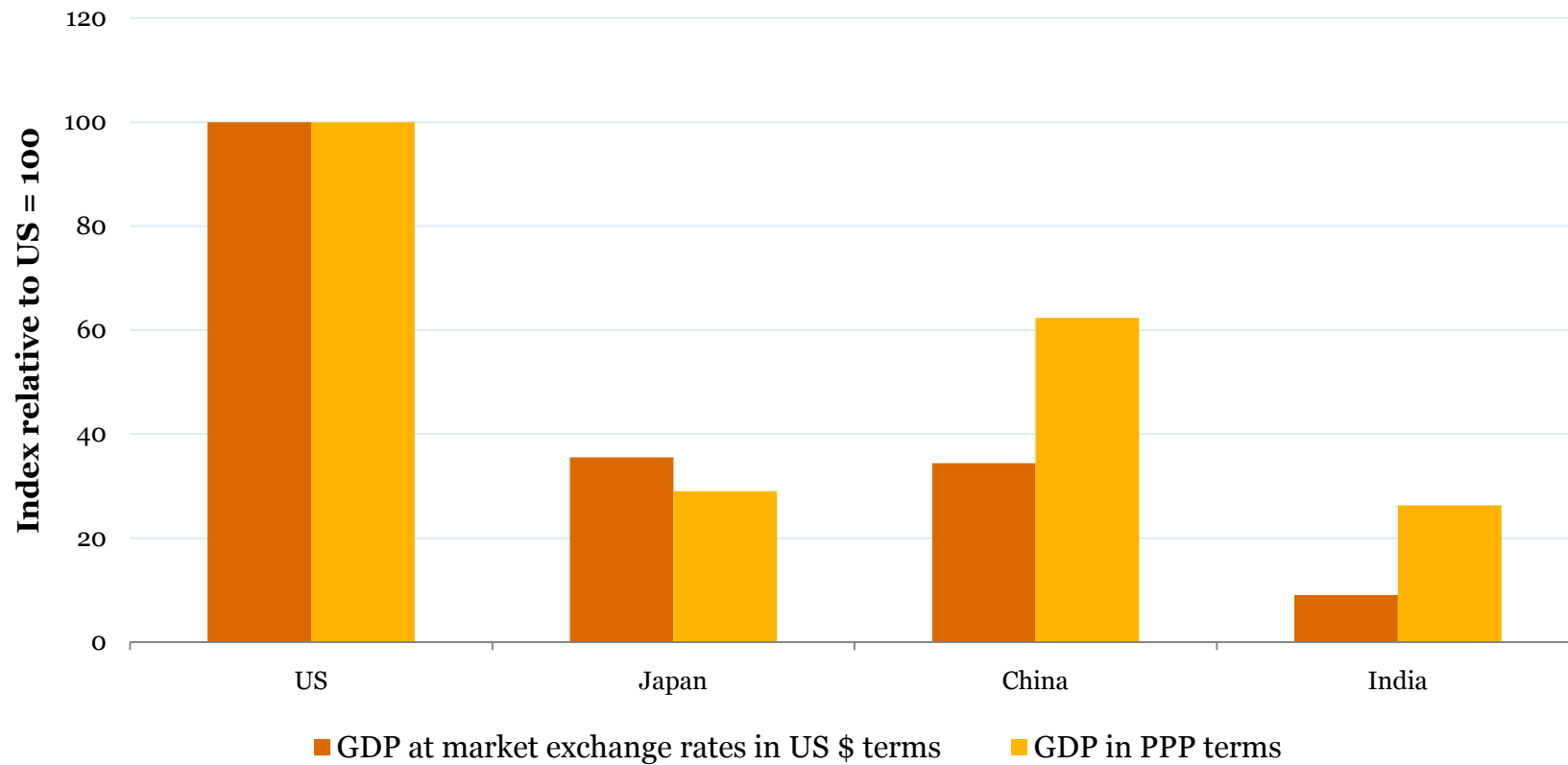
- Investment in physical capital
- Working age population growth (UN projections)
- Investment in human capital (rising average education levels)
- Catch-up with US productivity levels (at varying rates)

Real exchange rates vary with relative productivity growth

Note: results are not forecasts, but rather indicate growth **potential** assuming broadly growth-friendly policies are followed and no global catastrophes (e.g. nuclear war, radical climate change). Short term cyclical variations ignored.

How big are the Chinese and Indian economies?

Relative GDP at market exchange rates (MERs) and purchasing power parities (PPPs) in 2009



Source: World Bank (2010)

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Age vs Youth

Fast ageing

- Russia
- Korea
- Japan
- Poland
- China
- Italy
- Germany

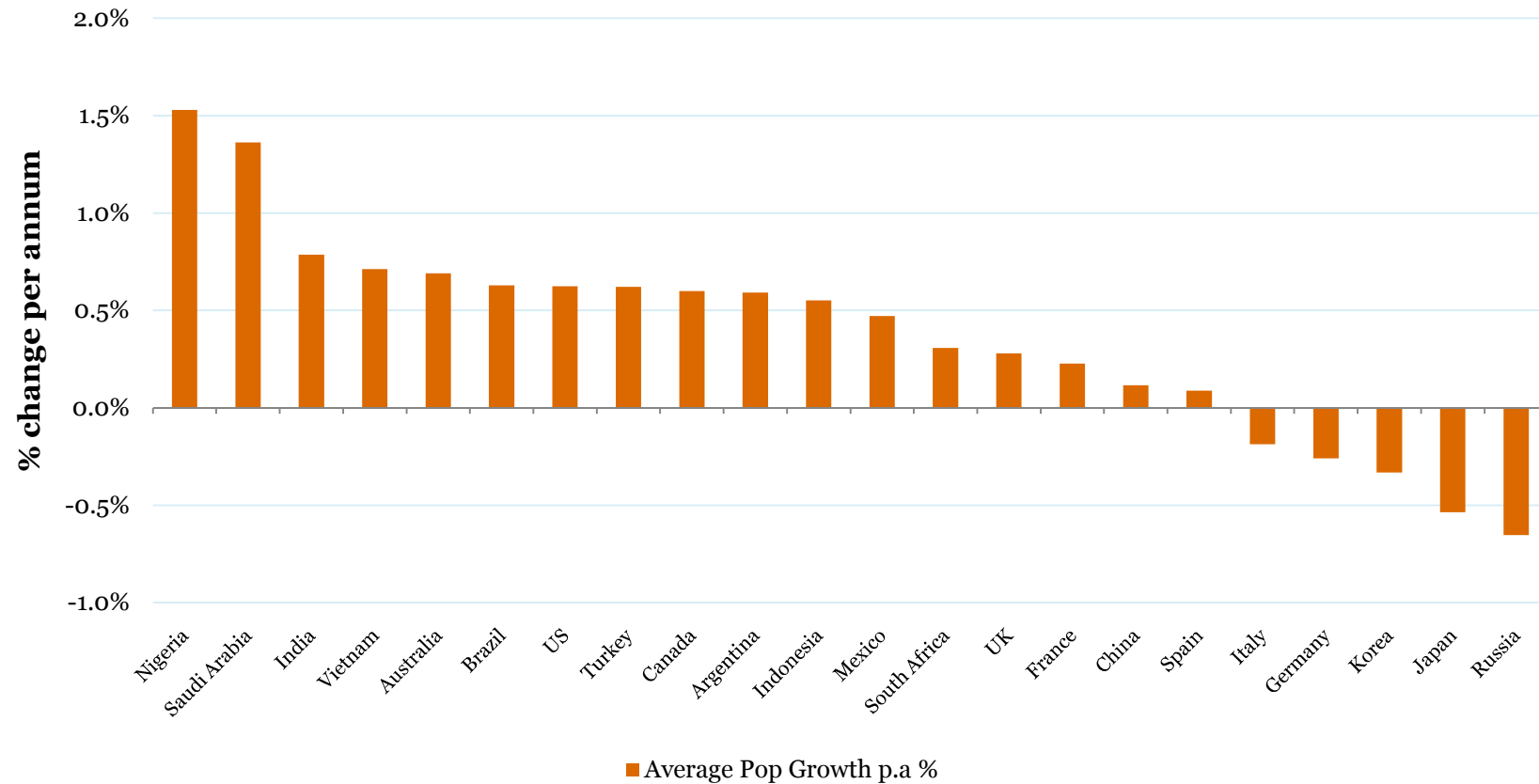
Younger for longer

- India
- Indonesia
- Brazil
- Mexico
- Turkey
- US (relative to EU)

Demographics will also affect consumption patterns

Projected average growth of working population (2009-50)

Projected average growth of working age population (2009-50)



Key Model Results

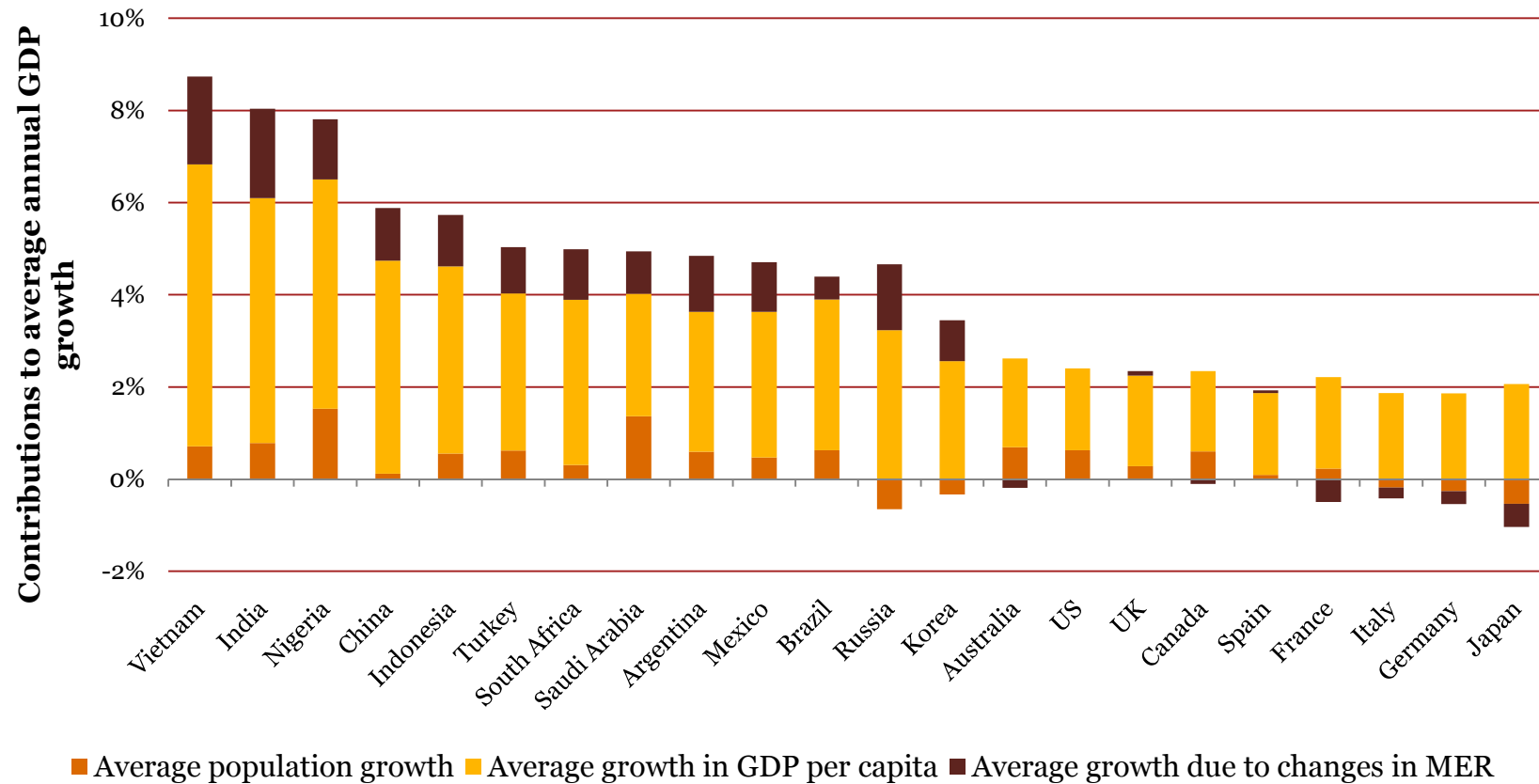
GDP growth

Relative size of economies

GDP per capita levels

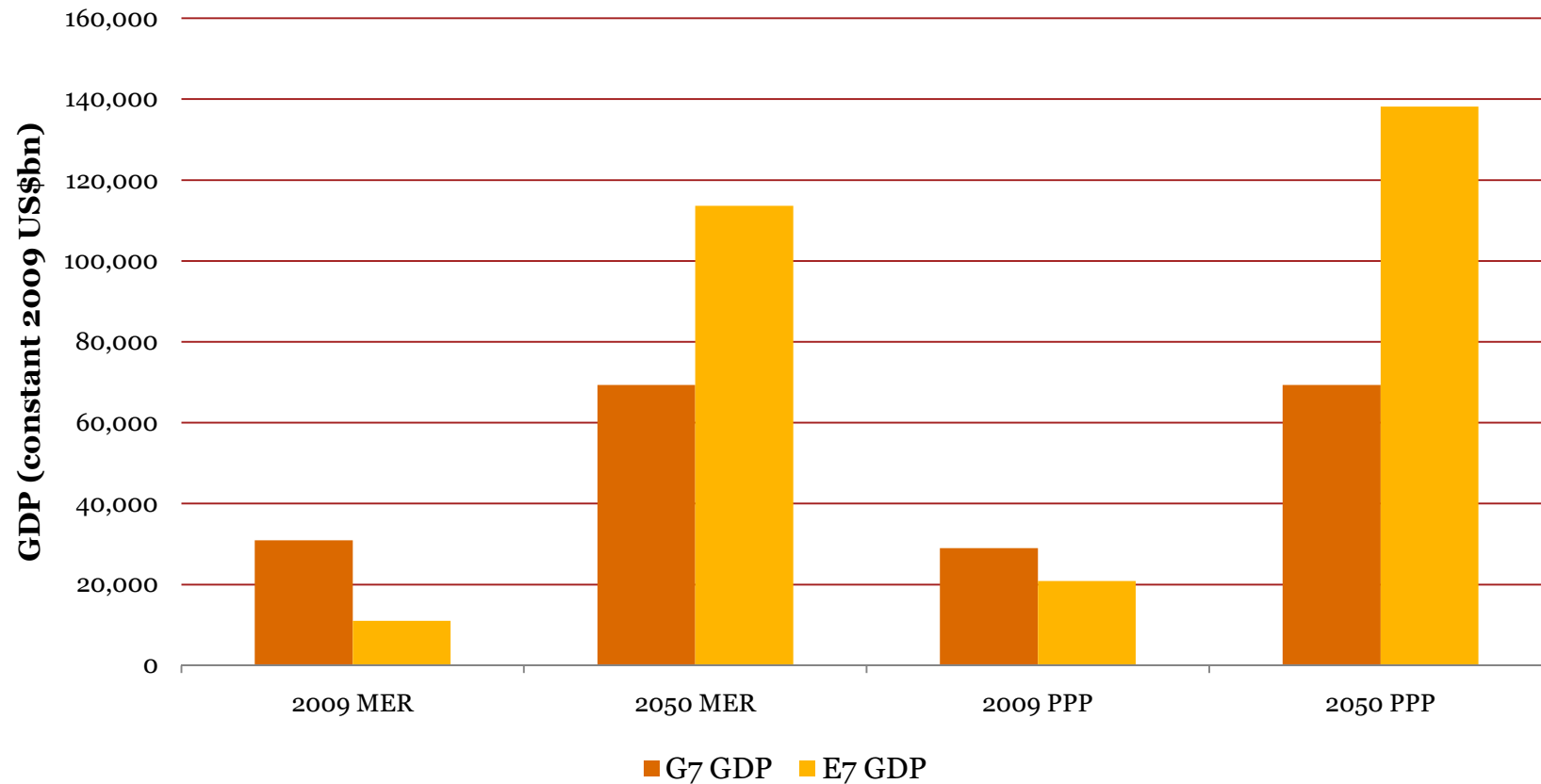
Emerging economies are set to grow much faster than G7 for the next four decades

Breakdown of components of average real growth in GDP at MERs (2009-50)



By 2050, E7 economies could become larger than G7 economies in PPP and MER terms

Relative size of G7 and E7 economies



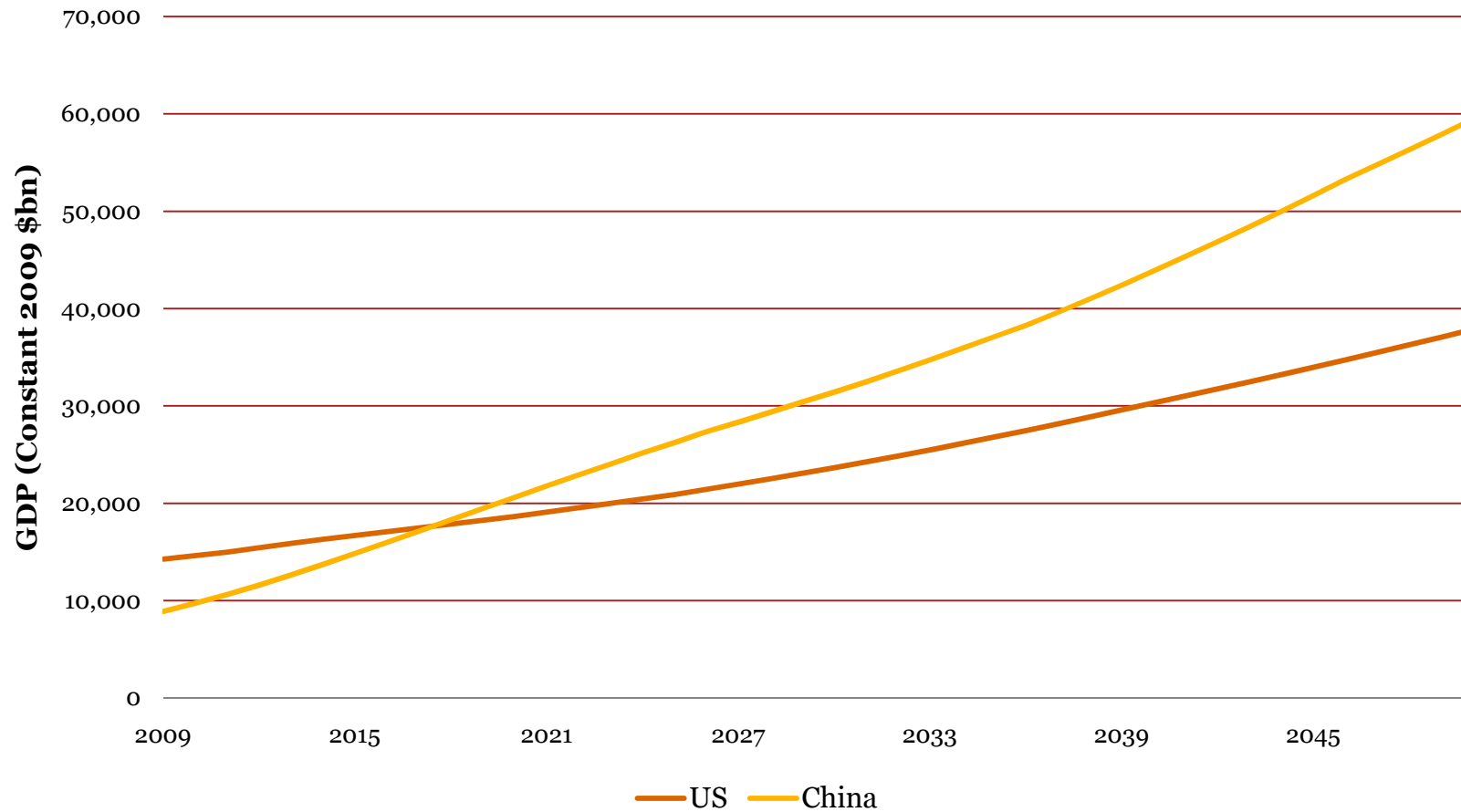
The global financial crisis has further accelerated the shift in economic power to the E7

- Crisis has hit G7 much harder than E7 in short term
- It has also caused downward revisions in estimates of longer term trend growth in G7 (particularly those like UK and US driven by debt-fuelled growth in past few decades, which now looks unsustainable)

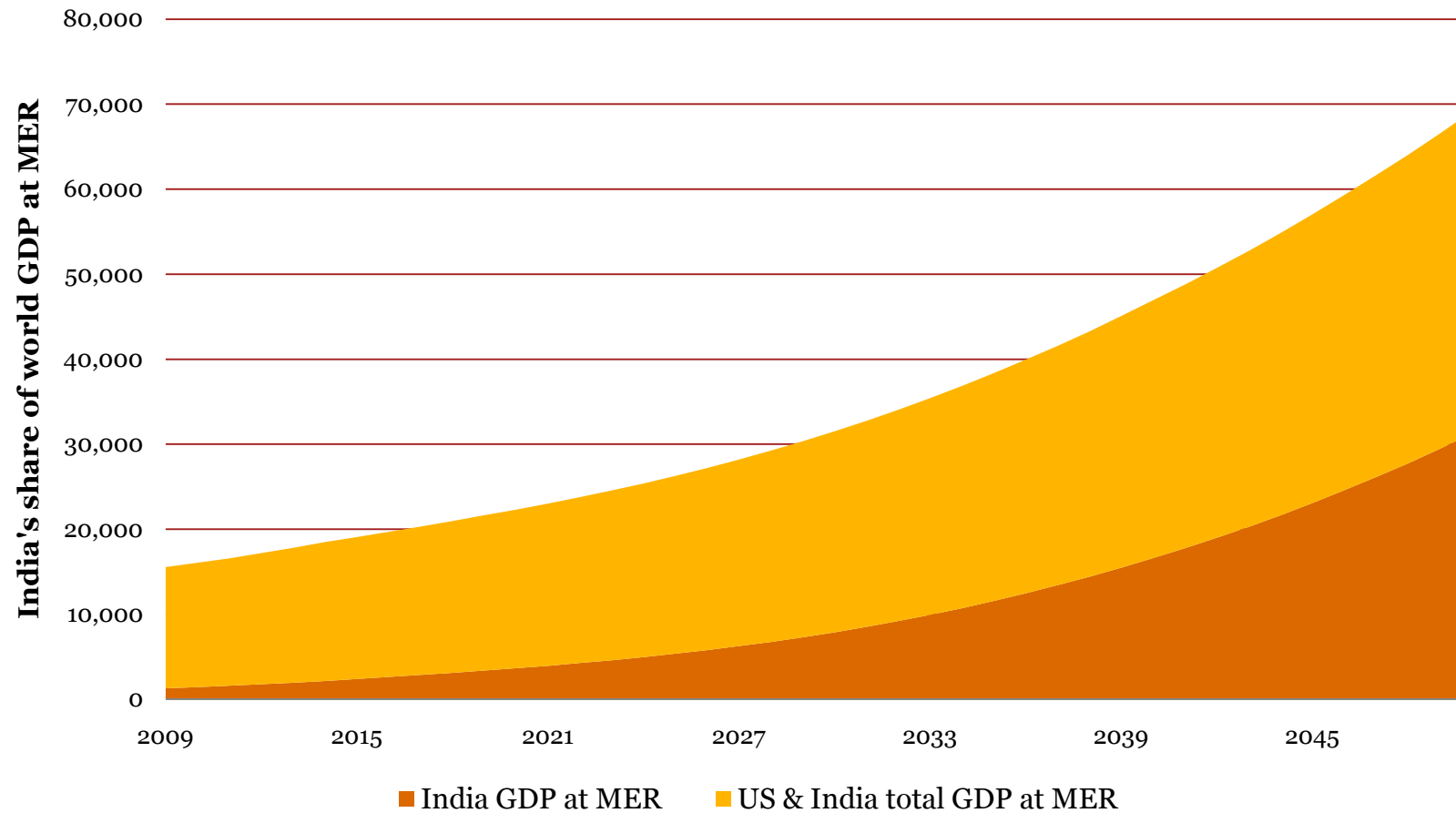
Consequently:

- In our 2006 report, we saw E7 overtaking the G7 in terms of GDP at MERs only in 2042
- Now we think this could happen as early as 2033
- Based on GDP at PPPs, total E7 GDP could exceed G7 GDP before 2020

China could overtake US by 2020 in PPP terms (in MER terms it would be in the early 2030s)

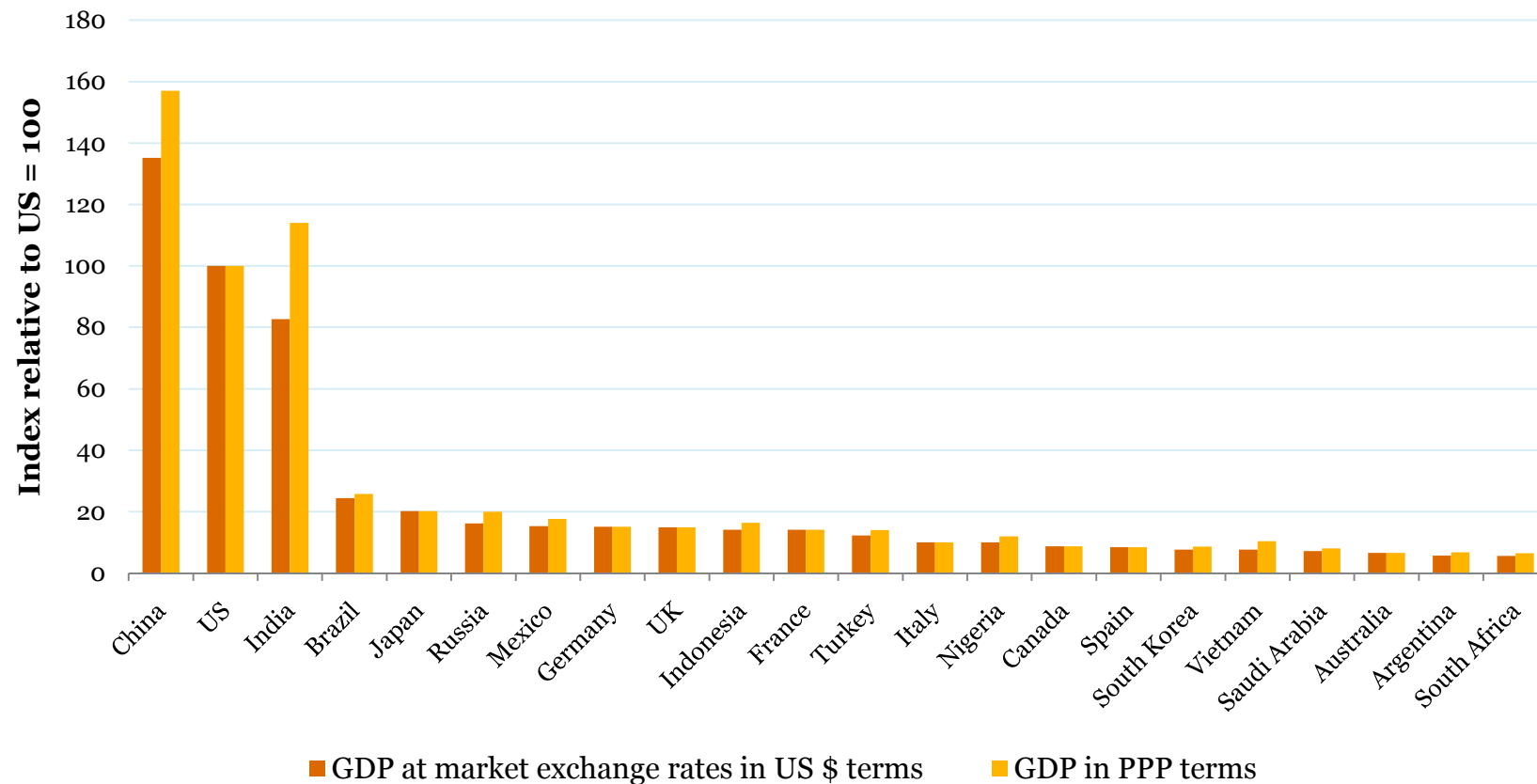


India's share of world GDP at MERs could grow from 2% to approximately 13%



By 2050, China, US and India could be by far the largest economies – big gap to Brazil in 4th place

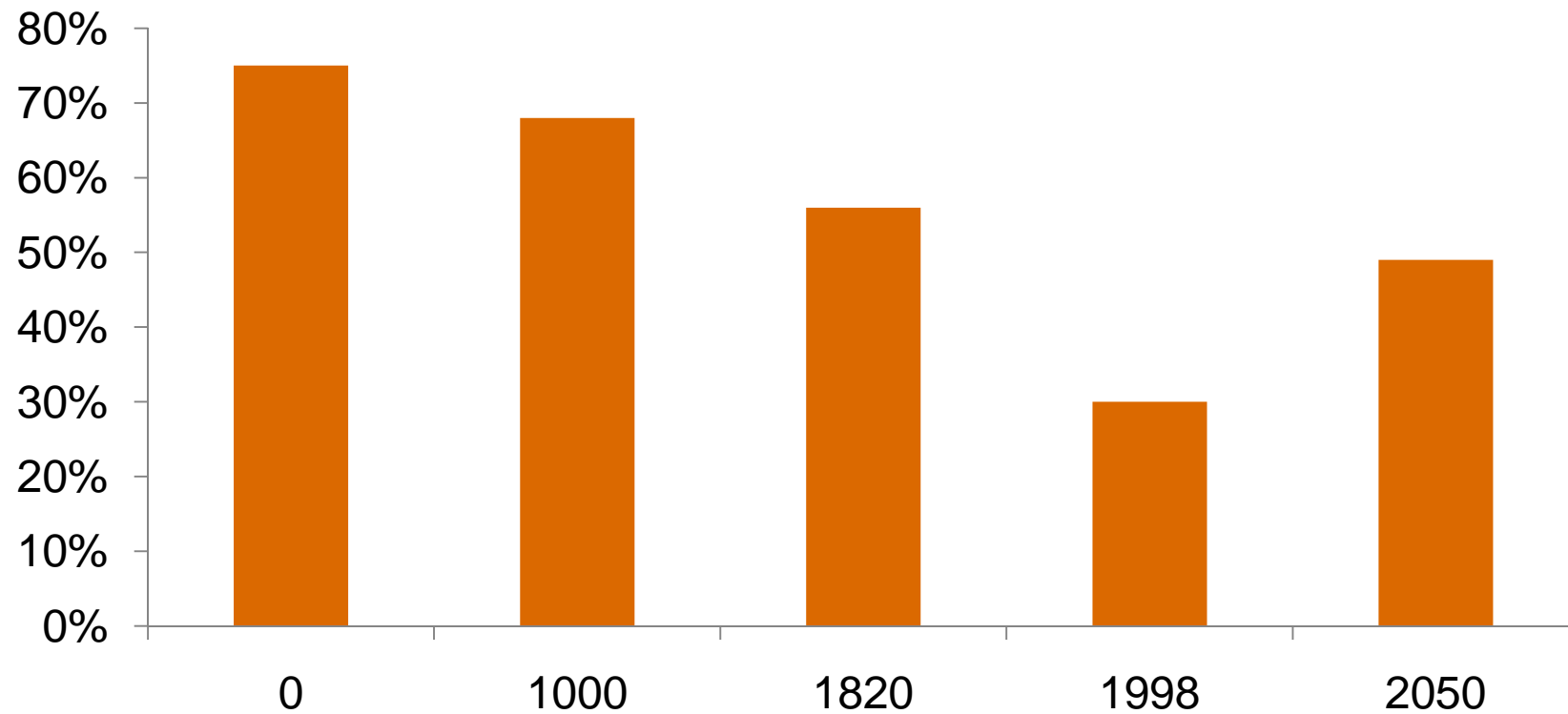
Relative GDP at market exchange rates and PPPs (2050)



Other E7 economies also grow to significant size by 2050

- Brazil could become bigger than Japan
- Russia, Mexico and Indonesia bigger than Germany or the UK
- Turkey could be of similar size to Italy

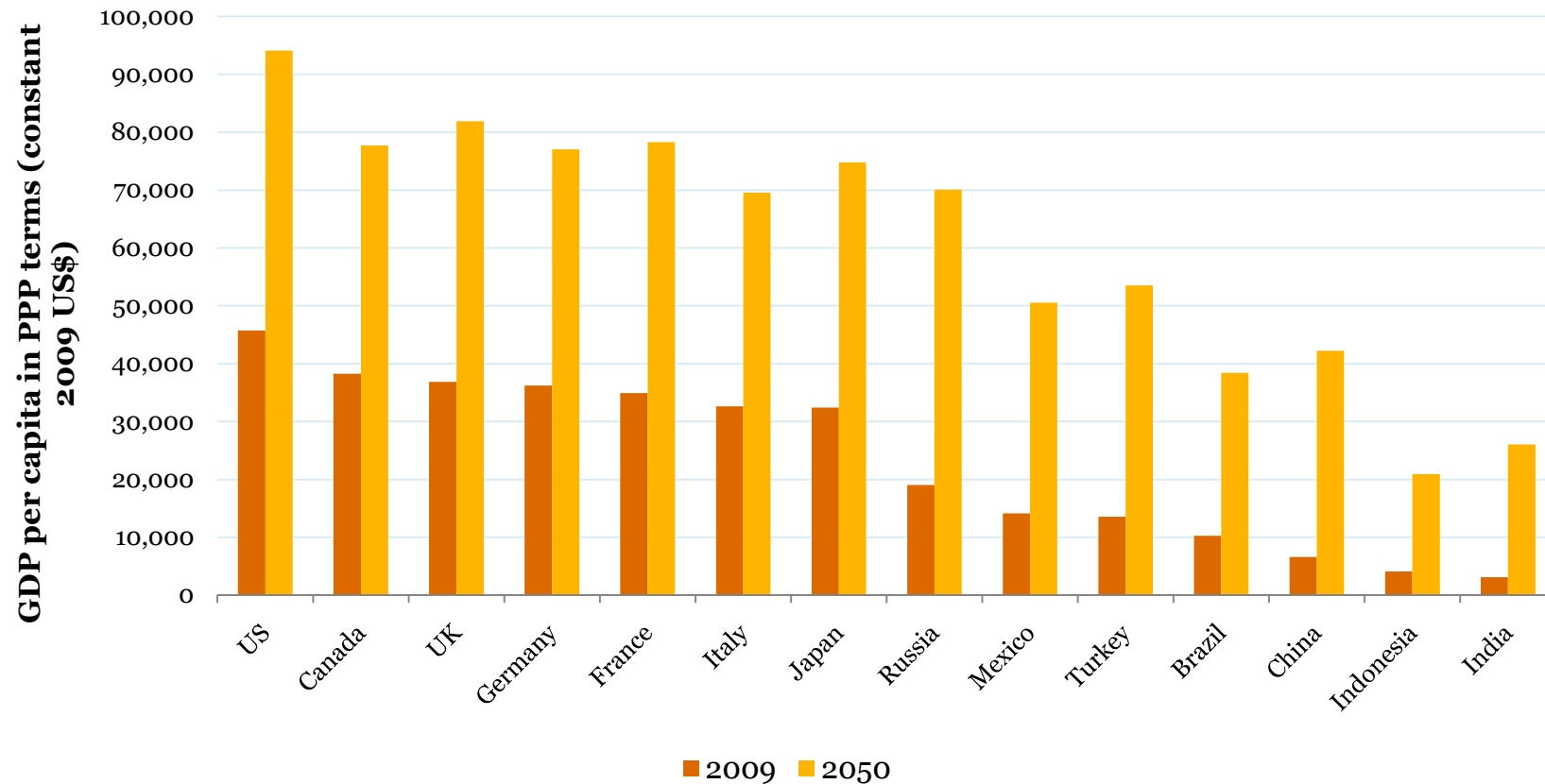
The rise of emerging Asia can be seen as a return to pre-industrial historic norm (% of world GDP)



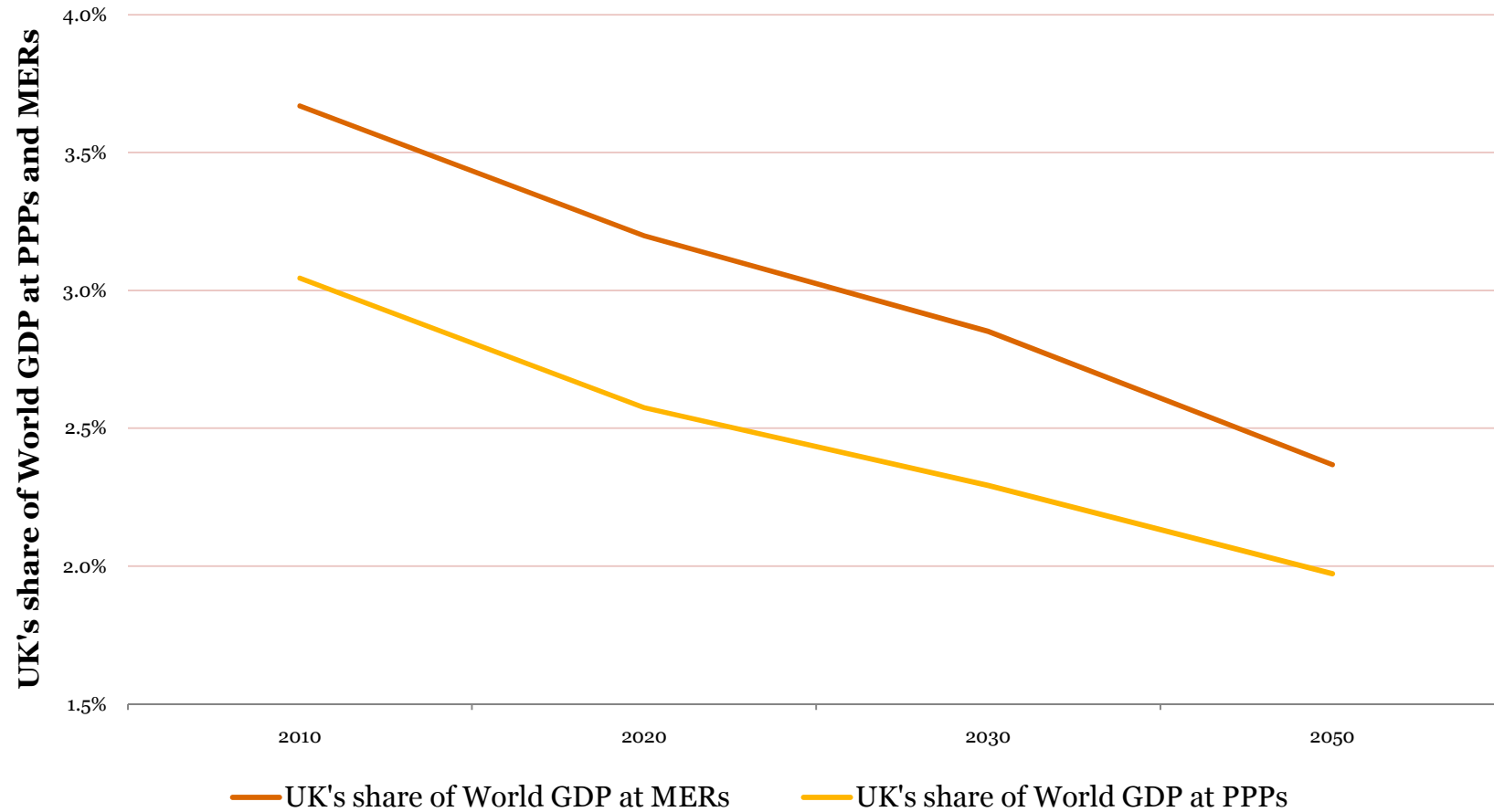
**Source: Maddison (OECD, 2006) for estimates to 1998,
PwC projection for 2050**

But income per capita levels in E7 still well below G7 levels

GDP per capita levels in PPP terms for the G7 and E7 economies



UK's share of world GDP is set to decline



Discussion topics

China vs India

What could derail growth in the E7?

Challenges and opportunities for UK companies

China and India have different comparative advantages

India has strengths in:

- IT skills and technologies
- low cost English speaking staff for offshoring services
- younger population

China has advantages in:

- low cost manufacturing
- higher average education levels
- higher savings and investment rates

Should create potential for mutually beneficial trade

But: also competing for resources to support growth

What might derail growth in the E7?

Macroeconomic and political instability, for example:

- Overheating and property bubble in China
- Fiscal deficits in India and Brazil
- Over-reliance on oil and gas revenues in Russia
- Drug-related violence in Mexico
- Political risks in Turkey and Indonesia

Energy, water and transport infrastructure constraints

Over-investment without proper capital allocation mechanisms (c.f. Japan in 1980s/1990s)

Protectionism in key export markets (US/EU)

Environmental crises – including global climate change issue

Potential impact on UK companies from rise of E7

Opportunities for:

- Retailers
- Global brand owners
- Business and financial services
- Creative industries
- Healthcare and education providers
- Niche high value added manufacturers

Challenges for:

- Mass market manufacturers (both low tech and increasingly hi-tech)
- Financial services companies not able to penetrate E7 markets who become vulnerable at home to E7 entrants
- Companies that over-commit to E7 without right local partners and business strategies

Summary

The E7 are coming!

- US, China and India to be three major economies by 2050
- India could grow faster, but China will remain much bigger
- China will also face smaller rivals in Asia like Indonesia and Vietnam
- Brazil could be fourth largest economy in world by 2050, ahead of Japan
- Russia should overtake Germany before 2030
- Turkey could also emerge as one of the largest European economies

Major challenges for E7 and other emerging economies to sustain recent strong growth

Huge opportunities for UK companies in E7 markets, but also great competitive challenges in the coming decades from fast-growing E7 rivals

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