



TOWARDS A RETURN OF INDUSTRIAL POLICY?
ARTNet SYMPOSIUM
25-26 JULY 2011
ESCAP, BANGKOK

Nurturing Services Industries

The role of innovation policy and education

Jane Drake-Brockman & Andrew McCredie
Australian Services Roundtable

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Australian Services Roundtable

- Member-based association
 - Around 100 members and growing steadily – mix of:
 - Sector associations
 - Individual companies and other organisations
 - Through the **association members** it represent many thousands of companies
 - **Individual members** include major services providers as well as SMEs
 - Board of Directors elected by members
- Covers *all* services industries, works on issues *common* to all services industries, represents Australia in Global Services Coalition.

Introduction


- Despite the growing body of evidence on the benefits from services trade liberalisation for national productivity and GDP growth, there is pervasive reluctance among most emerging economies to make major strides forward in opening up services to higher levels of domestic or foreign competition, let alone bind themselves to *existing* levels of openness.
- Policy makers in emerging economies often claim to have difficulty seeing where their national interests in services lie and hence seek to retain discretionary policy space for possible “industry policy intervention”

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- This presentation explains why the services sector is too important to ignore and explores some of the policy choices that can nurture the growth of services “centres of excellence” to attract high value added work onshore
 - Based on empirical research into the determinants of services competitiveness, this presentation makes a case for a stronger domestic focus on reform of regulatory and institutional inefficiencies and other barriers to doing business in services, provision of modern services infrastructure, including education, and facilitation of collaboration for services innovation including for SMEs

Significance of Services



- Services are rapidly becoming the greatest contributor to economic activity in developed and developing economies alike, currently worth around \$2.4 trillion in global exports.
- Global evidence is mounting that services are also a central driver and enabler of economic growth and development.
- Many services industries provide the essential infrastructural networks for the goods-producing sectors; the sector consequently plays a key enabling role across the whole economy.
- Services industries essential to the productivity of the economy as a whole include education, health, energy, water, banking and financial services, telecommunications and transport.

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- The biggest contributors to the recent growth have been the **knowledge-intensive business services** such as telecommunications, computer and IT Services, R&D Services, financial services, legal, accountancy, management consultancy services, architecture, engineering and other technical and professional services, advertising, market research, media and energy and environmental services.
 - The growth of these activities reflects growing demand for knowledge to deal with change – both technological and social. Typically, a high proportion of employees in these activities are very highly skilled.

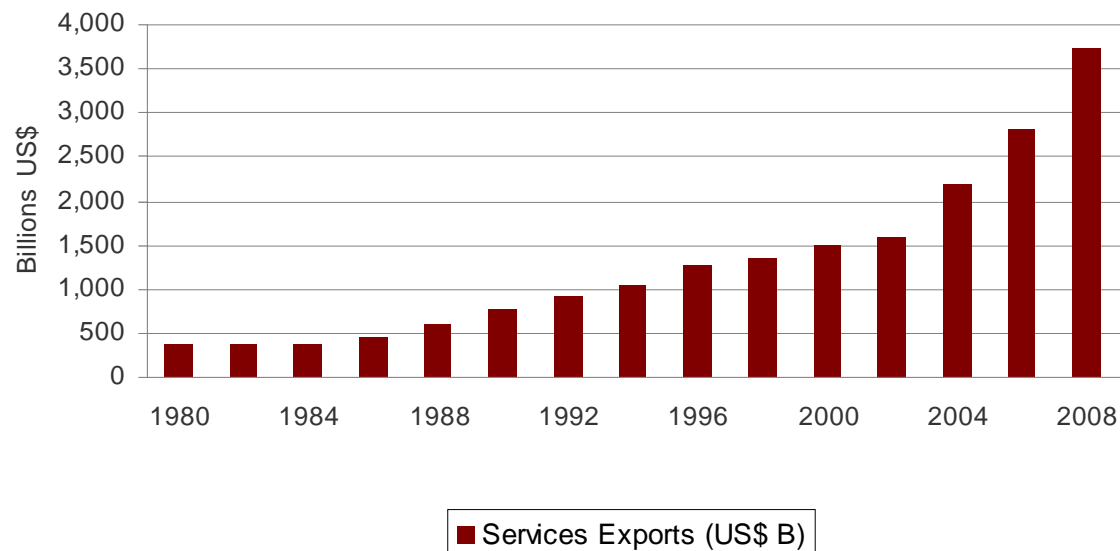
Services and Development



- Services now account for 67% of global economic output.
- In developing countries, the share of GDP generated by services has been growing; it rose from 37% in 1970 to 45% in 2006.
- As countries transition to middle income status, services play a large role.

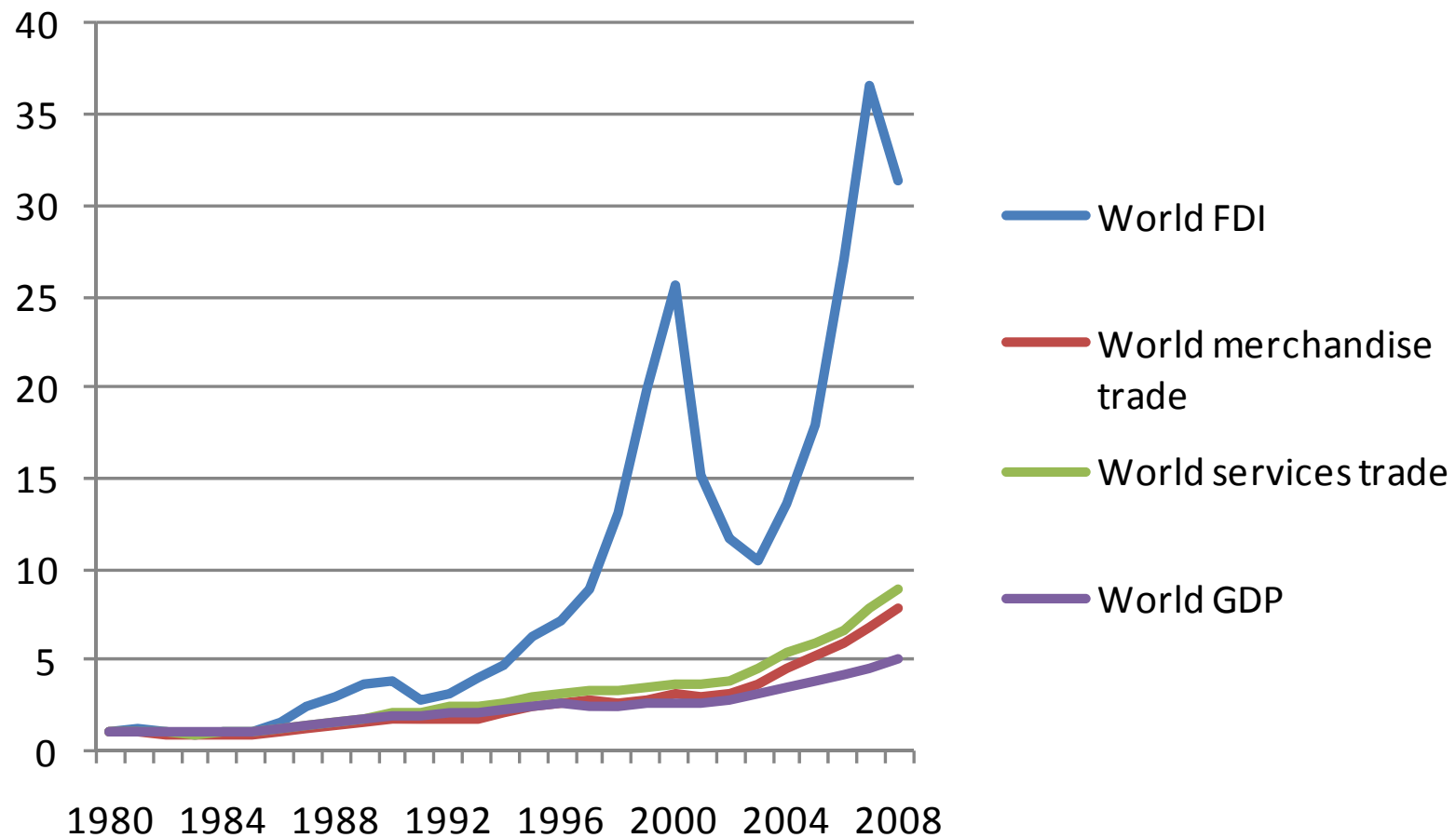
Growth of Services in World Trade Flows

Services Exports, 1980 - 2008



Source: World Trade Organization

FDI has grown faster than trade



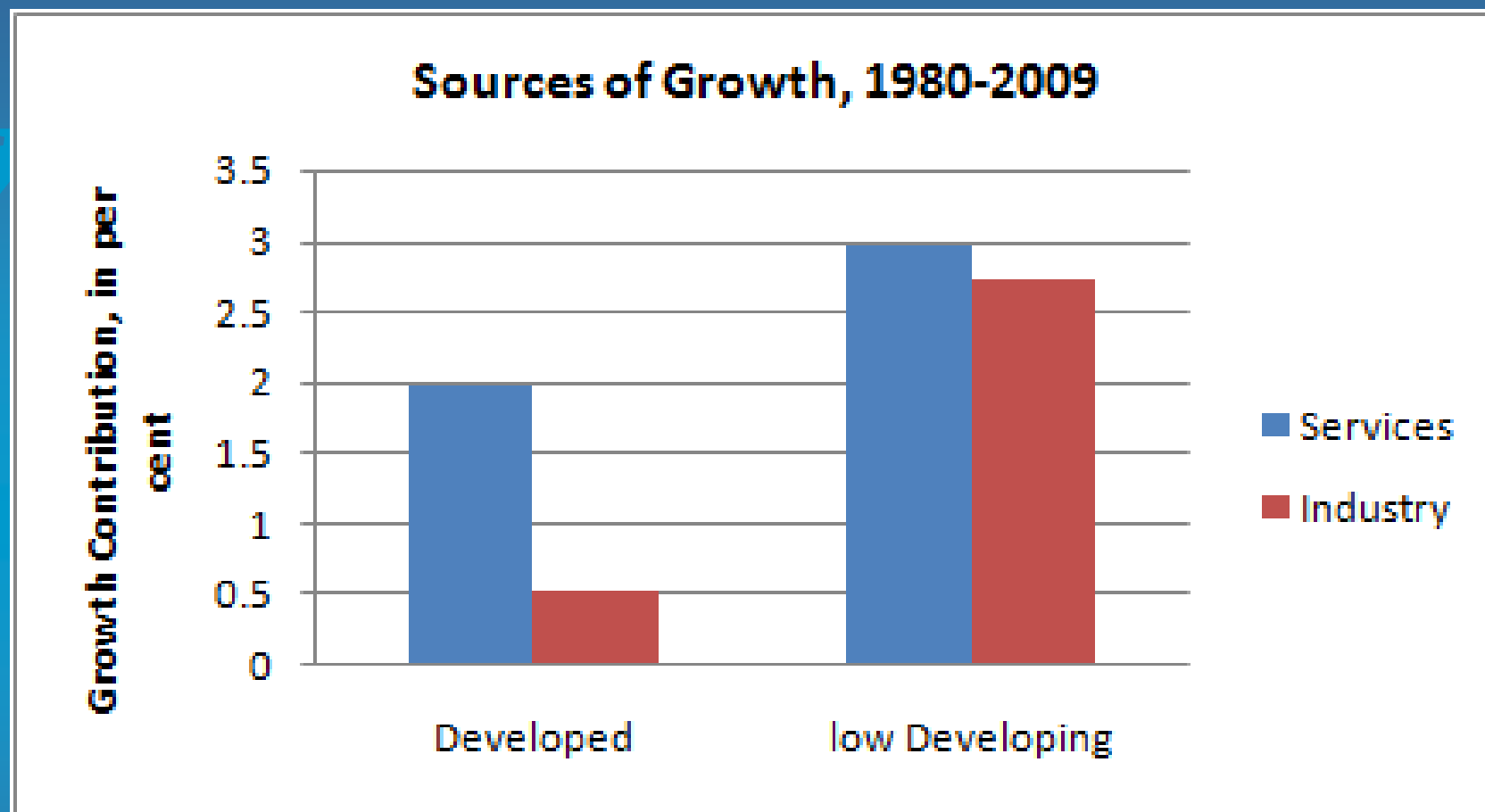
Investment in Services

- Services attract more foreign direct investment in developing countries than all other industries combined
- According to UNCTAD, developing countries received services-related inward FDI flows of \$255 billion from 2006-2008.

Employment in Services

- From 1995-2005, worldwide employment in the service sector increased from 34% to 39% of the global workforce.
- In the same period, employment in agriculture declined from 44 % to 40%, while the share of employment in industry has been flat
- Globally, skilled jobs are growing faster than unskilled jobs
- In Australia, nearly all university graduates are absorbed into the services sector.

Sources of growth in rich and poor countries



Ejaz Ghani Arti Grover Homi Kharas 2011, *Service with a smile: A new growth engine for poor countries*, 4 May 2011 VoxEU.org

Services and Industry Policy

- Empirical research on services is hampered by the paucity of data, especially at the sector-specific and firm level.
- Empirical research appears to confirm theoretical expectations that for both goods and services, competitiveness, as measured by export performance is a function of:
 - Differences in relative endowments of factors of production (including “know how”?), infrastructure and quality of institutions
- Differences between countries are not static and evolve depending on the policy choices a country makes

Factors of Production

The empirical literature and firm level and country level case studies confirm the critical importance of human capital (talent, education, skills and ideas)

- Tertiary enrolment is significant in affecting services exports
- Firms refer to the importance of multi- and cross-disciplinary education, including languages

Services Infrastructure

A stylized world map in a lighter blue shade is visible in the background of the slide, centered behind the text.

The empirical literature confirms the importance of services economy infrastructure, including the quality of the telecommunications network and internet penetration

- in both the exporting and the importing country, given that services are relational

Institutions

- The quality of institutions, as measured by the degree of corruption, complexity of export procedures, rigidity in employment law, or the economic freedom index have a positive influence on trade in services
- Institutions which play a role in independent analysis of the costs and benefits of regulatory regimes

Regulation

- Information asymmetries feature in many services markets
 - Better understanding of how to regulate these markets efficiently
 - Transparency and predictability of regulation
 - Burdensomeness of regulation
 - Domestic and international regulatory coherence and Interoperability
 - The work of cutting regulatory red tape should have high economic priority, given the strong international evidence of links between regulatory reform & productivity growth.

Regulatory reform is very important to business in meeting today's global challenges

- Because the competitive pressures are now so fierce that the extent to which regulation at home is efficient or burdensome can make or break a local business in the global market place.
- Because the extent to which local business can connect effectively with business elsewhere in the region depends on how familiar that regulatory environment is.
- Because effective connection is essential to international business performance, as the global supply chain model becomes increasingly pervasive
- Because business transaction costs would be reduced if
 - the regulatory environment was straightforward and predictable and
 - if Governments could achieve a degree of regional harmonisation in regulatory practice

“Citizen Services”

- Health, Education, Water, Sewerage, Energy, Post, Telecommunications, Finance, Transport, Public Safety, Urban Planning etc etc
- The level of government intervention is much higher than in the goods sector; all of these services are regulated for public policy purposes, usually to do with universality of service provision
- The message that emerges from the underlying economics is ‘Don’t prejudice your citizens’ quality of life by regulating inefficiently, generating sub optimal delivery of citizen services’
- If the objective is socio-economic development, introduce pro-competitive reforms that generate productivity gains and send a signal to foreign investors

There is a relatively limited literature on how developing countries can grow a services industry

- How to build centres of excellence
- How to train, attract and retain the skill sets
- How to facilitate services innovation, collaboration and customer orientation
- Which enabling infrastructure to provide
- Which regulatory settings will ensure interoperability across the value chain
- How to facilitate the freer flow of ideas as well as people
- What sort of toolkit with which to promote exports (to attract projects to teams based onshore)

What can we learn from experience in the OECD economies?

- Evidence merging that “multi-factor productivity” which used to be the unmeasurable residual which we called “technological change”, should be better understood as **services innovation**
- **Services innovation** appears to account for the vast bulk of **productivity growth** and **services export performance**

Services Innovation and Productivity

- A significant dimension of the transformation to a services dominant economy has been the growth in economic importance of business investment in intangible assets.
- Recent analysis by the National Endowment for Science, Technology and the Arts in the UK provides evidence of the increase in the value and use of intangible capital in both absolute terms and relative to investment in machinery and equipment. NESTA found the contribution of intangible capital deepening and growth in multi-factor productivity contributed to 67 per cent of growth in labour productivity for the period of 2000-2007.

Innovation in Services is not just a matter of R&D

Services Innovation

- takes place at the point of interaction between services provider and the client
- is driven by client relations more than is the case for innovation in manufacturing
- is people-driven as well as laboratory-driven
- does not necessarily offer necessary economies of scale
- involves a high level of interaction and interdependence between knowledge providers (such as research organizations) and knowledge users (such as service firms)
- does not necessarily take place as a specialised activity located in a separately part of a firm but is tangled up with everyday creativity and design.
- requires both technological and non-technological inputs, including the social as well as the natural sciences, the creative arts and humanities.
- suffers from inadequate access to collaboration opportunities between services providers and the education and R&D community



Insufficient focus in the development or the industry policy literature on the link between services innovation, economy-wide productivity growth and economy-wide international competitiveness

Over-focus on access to technology/know-how rather than generation of new ideas, new solutions, new performances

Education services providers and R&D service providers have a lot to think about!

Policy Choices

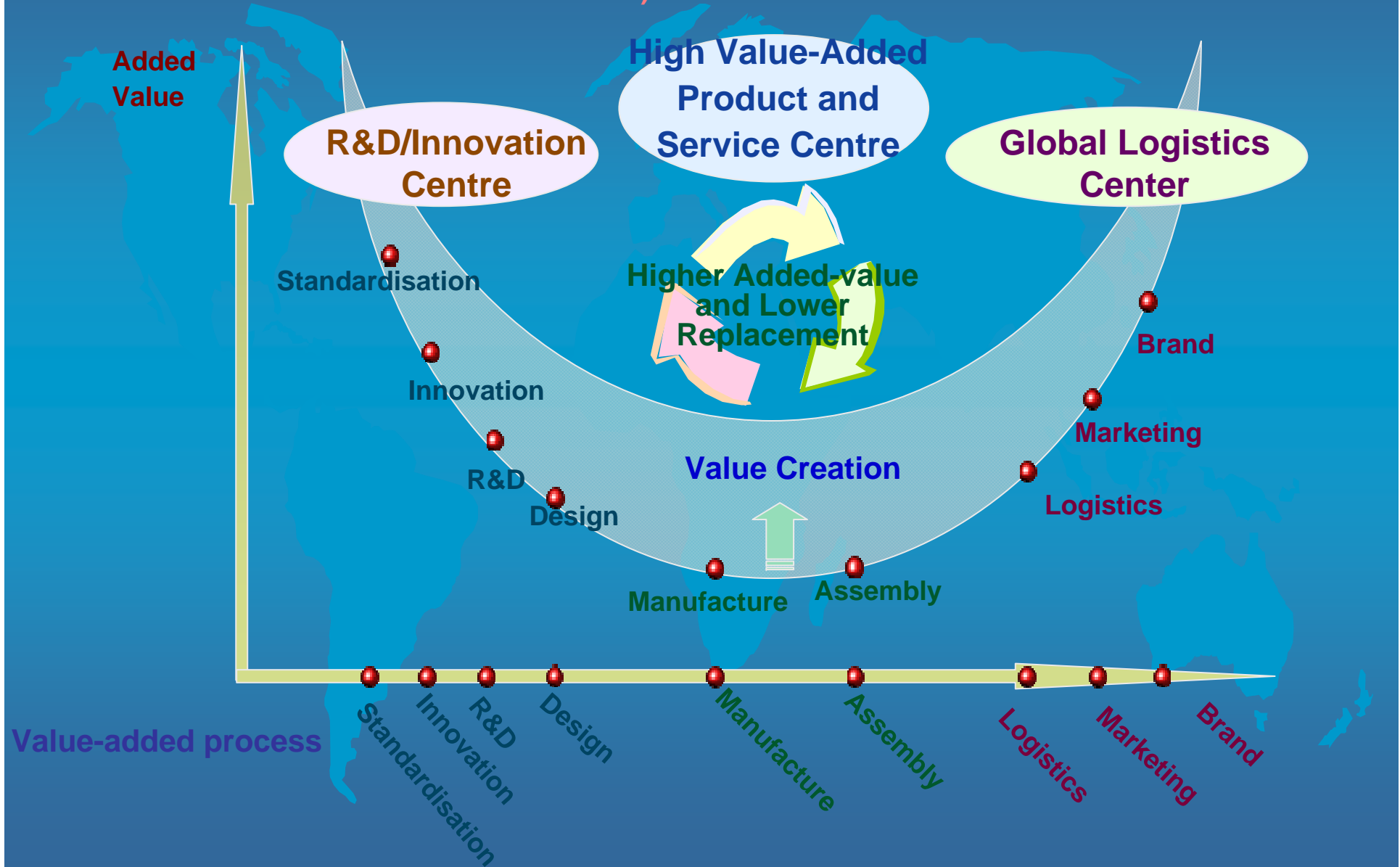
- Openness of policies affecting trade, investment (inwards and outwards) and labour mobility in services are important
- Coherence of Regulatory settings
- Proactive “industry policies” may have an influence, though the empirical evidence is inconclusive
- Services firms tend to think that active facilitation of collaborative approaches to “services innovation” may be more relevant
- Business associations in services play a constructive role

Moving up the Value Chain

- The objective, in moving up the value-added ladder, is to engage in value-adding processes, namely design, R&D, innovation and standardization – and to shift away from manufacture and assembly into logistics, marketing and brand.
- The model is known as the “**Smiley Face**”, the curve used by Acer Computer’s CEO Stan Shih to convince Chinese Taipei to permit Acer laptops to be manufactured in China. Mr Shih said: “Hollowing out of tangible things is not critical. Hollowing out of intangible things is really critical.”

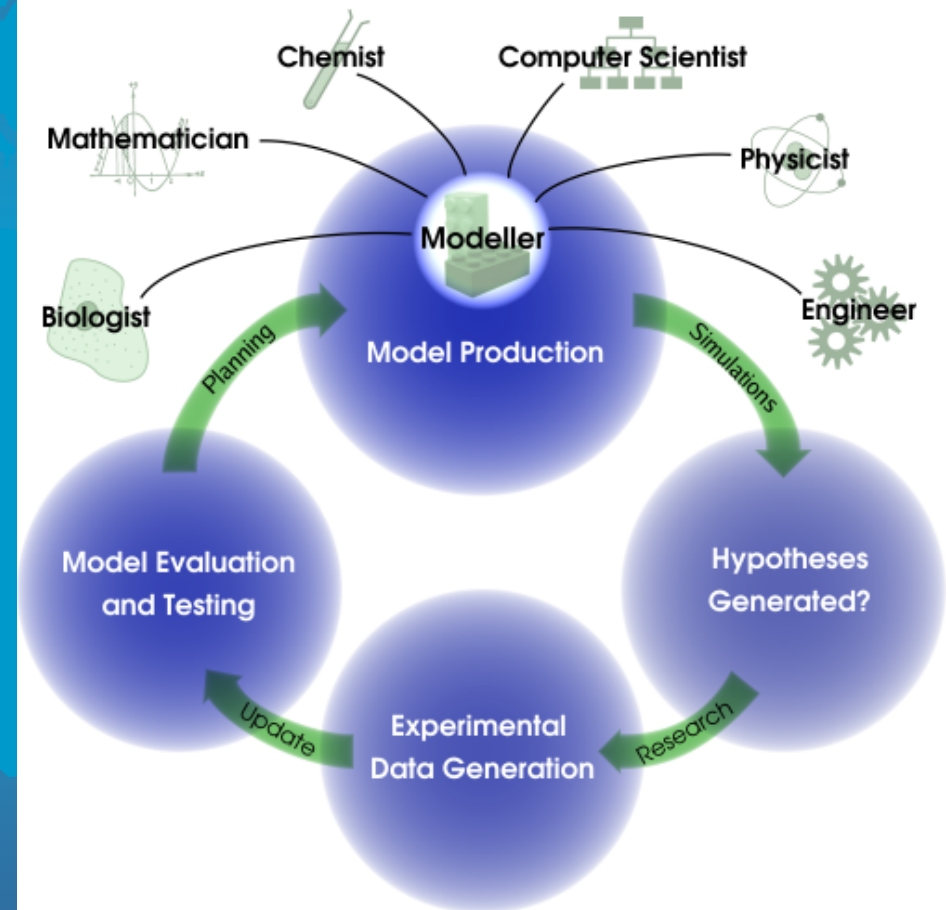
“Smiley Face”: conceptual model of the shift to a high value added, globally integrated, services economy

(Source: Business Week International online extra, May 16, 2005, Stan Shih on Taiwan and China)



Services Innovation underpinned by Science

- Service Science - an emerging discipline that integrates:
 - Computer science
 - Engineering and design
 - New business strategies
 - Operational research
 - Social science and law
- Significant potential to enhance services innovation by adopting a multi-disciplinary approach



Services Trade Liberalisation

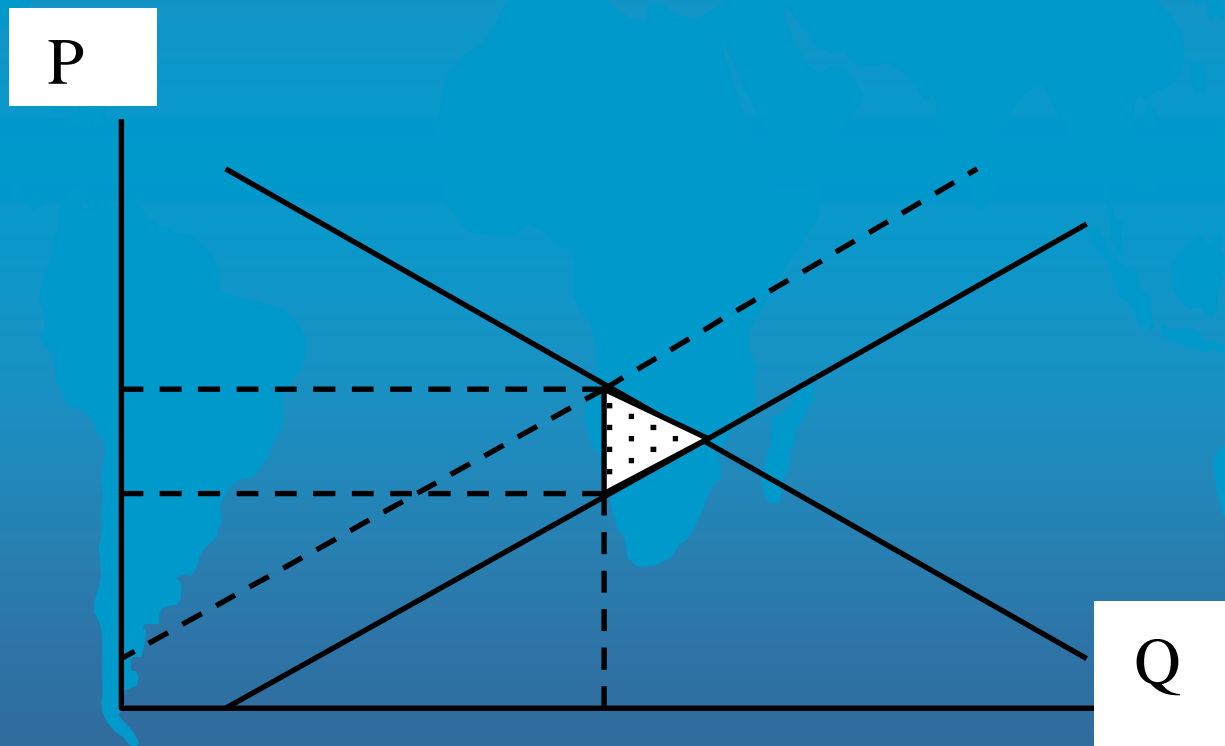
- 2009 study by the World Economic Group (Groupe d'Economie Mondiale) at Sciences Po, Paris shows the costs of services trade barriers are at least twice as high as for goods.
- Australian PC study; Services trade liberalisation could result in global welfare gains more than double the potential gain from liberalisation of barriers to trade in industrial goods and over 30 times the projected gains from liberalisation of global agricultural trade.
- 2010 CIE study commissioned by DFAT; This study shows that services trade reform could lead to an annual gain of up to \$110 billion per year over 2011-25 for developed countries and \$240 billion for developing countries.

The economics of services trade barriers

- Trade barriers have both rent-creating and cost-creating effects.
- The rent-creating effects arise from limiting market entry (measures which have these effects are akin to taxes, tariffs and quotas).
- Other kinds of barriers are cost-creating in their impact (eg regulatory compliance costs increase the cost of, and sometimes prohibit, service delivery, preventing knowledge flows that would raise productivity).
- Different kinds of services trade barriers measures add to both rents and costs to different degrees.
- There can be significant socio-economic benefits from trade liberalisation that unblocks domestic impediments in firms' capacity to make productivity gains.

Welfare and Distributional Effects of Liberalisation

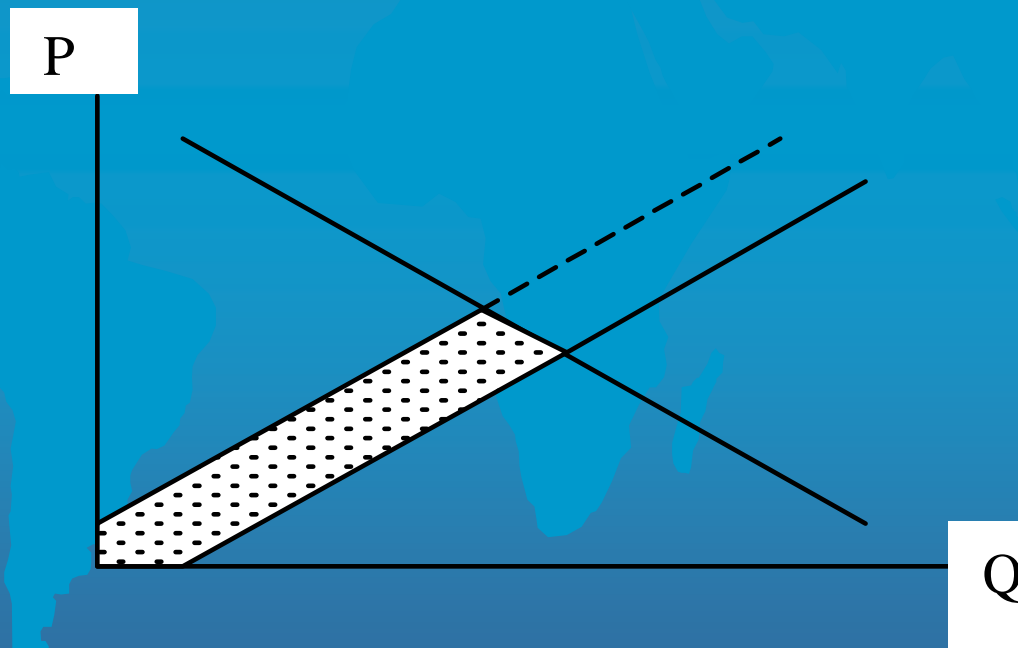
Liberalisation of rent-creating non tariff barriers will yield ‘triangle gains’ in producer and consumer surplus associated with improvements in allocative efficiency (the shaded area below), but would also have redistributive effects associated with the elimination of rents to incumbents.



Data source:

Philippa Dee, Christopher Findlay, Richard Pomfret, 2007, *Trade Facilitation: What, Why, How and*

Liberalisation of cost-escalating measures, which create the same vertical shift in the supply curve, would be equivalent to a productivity improvement (saving in real resources) and yield 'roughly rectangle' gains (the shaded area below). This could increase returns for the incumbent service providers, as well as lowering costs for users elsewhere in the economy.



“win-win” of services trade reform

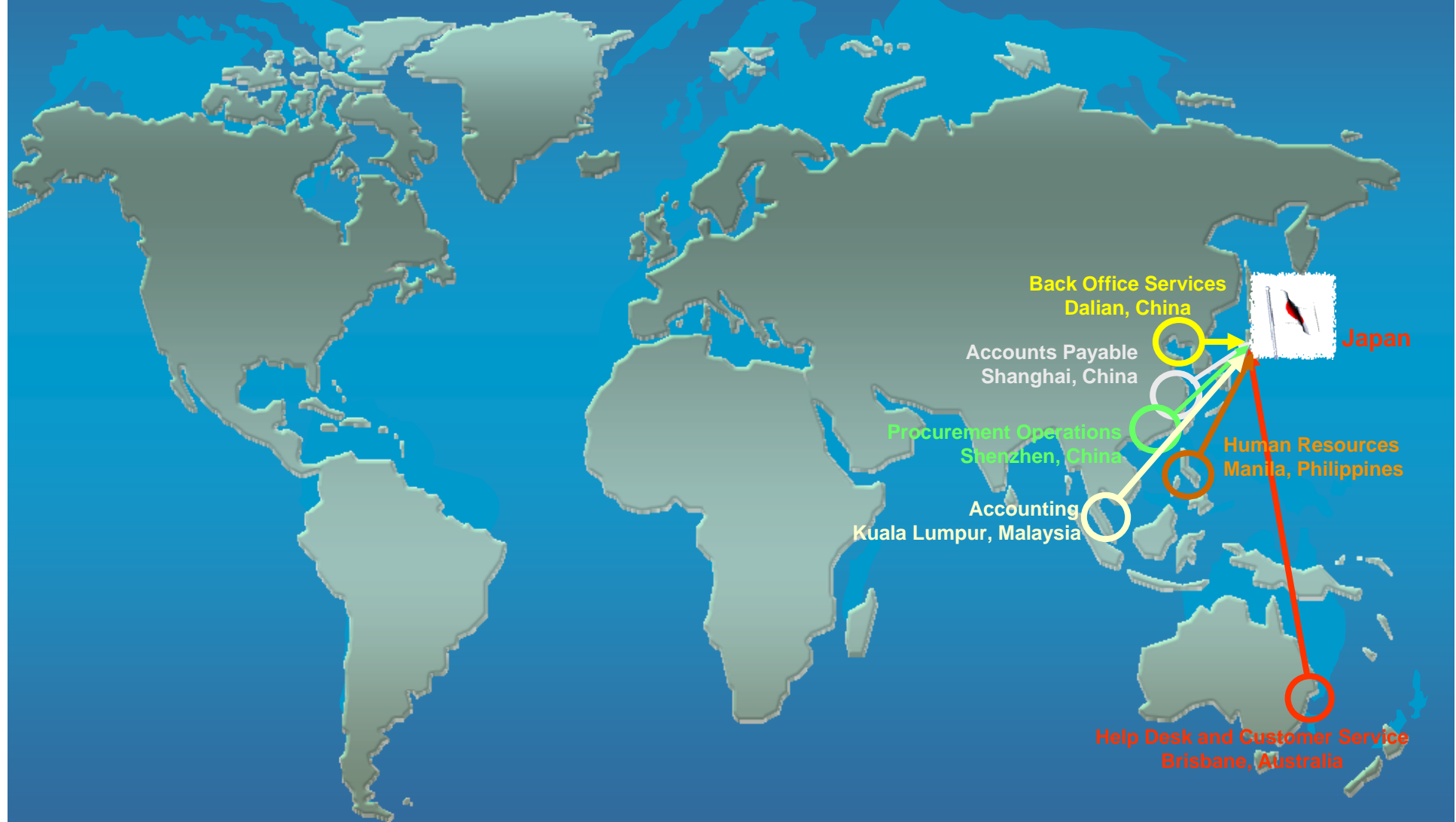
- The “rectangle” gains are likely to exceed “triangle” gains by a significant margin. This means the aggregate welfare effect of measures which are cost reducing will be greater than rent-reducing measures.
- In goods trade, the barriers tend to be rent creating.
- In services trade, many more barriers are cost escalating.
- This means there are relatively large welfare effects to be gained by liberalising barriers which are cost escalating.
- There is an evidence-base merging to support this underlying theory. A number of studies have confirmed that the primary feature of services trade liberalisation is a rise in the level of domestic productivity.
- The positive impact of services trade liberalisation on domestic services providers is such that services trade reform can be genuinely “win-win”.

Data source: Philippa Dee, Christopher Findlay, Richard Pomfret, 2007, Trade Facilitation: What, Why, How and Where?

Regional supply chains

- The application of enabling services such as telecommunications and IT has driven segmentation of goods supply chains into production units which can be dispersed geographically, and yet be connected
- The same thing is happening in services; for knowledge-intensive services industries where value can be “captured” and “stored” so that production can be separated from consumption and scaled up, the growth of cross-border digital trade is enabling development of services supply chains
- Any value chain activity or cluster of activities (business functions) can become a core competence, or be outsourced – most can also be offshored, leading to new competitive opportunities for country and firm level specialization
- Firms need to be able to be more flexible as they seek their core competence
- The policy challenge is to give firms the space in which to be more flexible ie to free up barriers to interoperability with other business functions in the value chain.

IBM Japan harnesses its global integration capabilities



Summary

- Services are more skills intensive than the other sectors, so Talent and Ideas are critical ingredients in competitiveness.
 - Multi- and cross-disciplinary Education and Training, including language skills
 - Innovation policy which recognises the different needs of services innovation
- Connectivity across the border; Telecommunications, Aviation, Global Standards, Openness at the border
- An enabling business environment behind-the-border and an efficient, transparent, domestic regulatory framework
- For services companies (where human capital costs are often 70-80 % of total cost) everything to do with recruiting, training and deploying people can be critical.

Work for the Global market flows to where it can be performed best

Case Studies and Growth Models



Australia

- Services accounts for 89 % of Australia's GDP
- 8.5 out of every 10 Australians works in the services sector
- Services accounted for all net job growth over the last 2 decades
- Nearly all university graduates work are employed in services
- Services has provided the bulk of Australia's productivity growth in the last 15 years
- Services, on a par with agriculture and manufacturing, are under represented in the export data.
- Recent work by services industry bodies suggests that services account for at least twice as much foreign exchange earnings as previously believed.

Hong Kong

- Services accounts for over 97% of Hong Kong's GDP%
- 95% of the Hong Kong work force is employed in the services sector
- Hong Kong is a net services exporter - indeed Hong Kong is an overall net exporter only because of the contribution made by services (services are 20% of exports but only 11% of imports)
- Hong Kong-based Services such as finance, logistics, maritime services, and trade related services of all kinds have developed largely in response to the need to enhance the efficiency of the dynamic manufacturing base in the Pearl River delta
- These services are firmly embedded in goods exports from the region

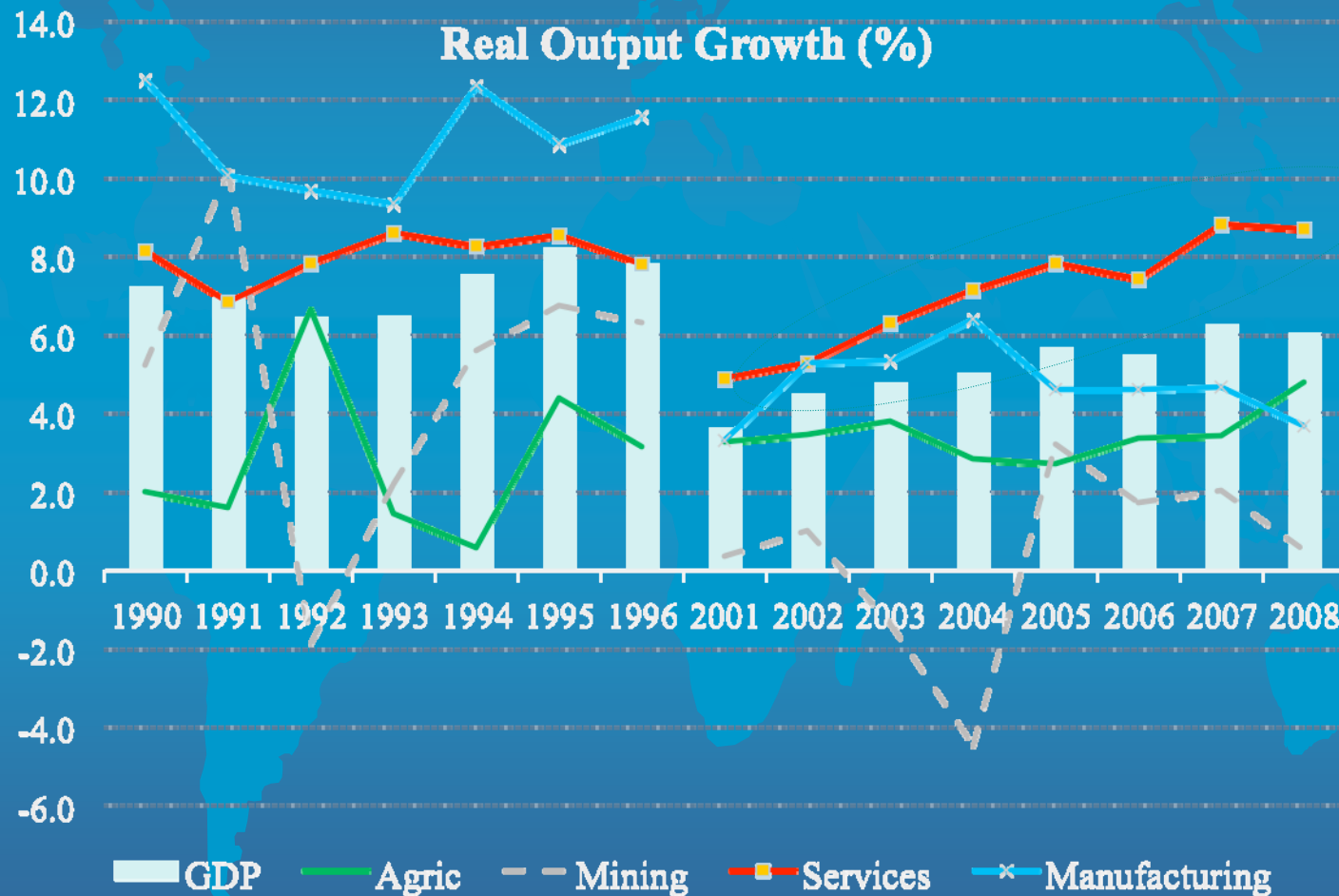
China PRC

- Services are underrepresented, at 40% of Chinese GDP, compared with an average of 54% of GDP for developing countries as a group.
- In China PRC, the services sector is increasingly a target for accelerated development and associated closer policy attention.
- The importance of the services sector is fully recognized in China's Five Year National Development Plan for example and was also an explicit focus in its economic stimulus package.
- Targets have been set for services employment growth in the Pearl River Delta.

Indonesia

- Services industries contribute to 47 percent of Indonesian economy and absorbed around 40 percent of employment, many of which are informal workers and SME businesses
 - Competitive services matter for economic productivity
 - Services are intermediate input for producing goods and services: 25% for manufacturing and 70% for services.
 - Facilitate and link production processes
 - Services industries have showed remarkable performance
 - In the 90's, services output was correlated more with manufacturing industry
 - “Take-off” between 2000 and 2008: growing at average 7%
- (Raymond Atje CSIS & Sjamsu Rarhardja, World Bank)

New Era for Indonesia's Services Industries?



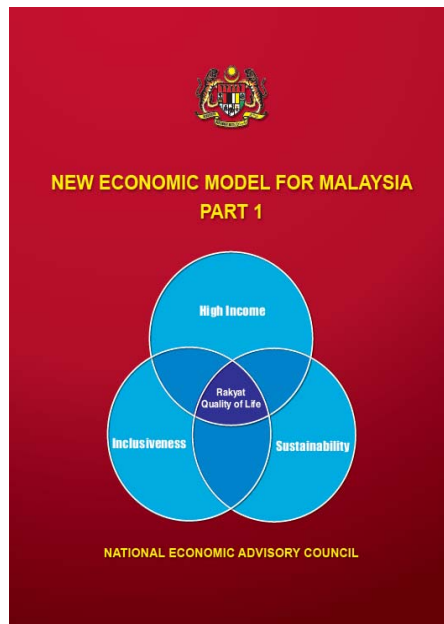
Source: estimates from BPS data

Malaysia

- Excluding government services, which are 7-8 % of GDP, services now account for 57% of Malaysia's GDP and 55 % of employment.
- The target under the 10th Malaysia Pan is to increase the share of non-government services to 60% of GDP by 2020.
- MATRADE has a strong focus on promoting trade in services.

On March 30 2010 the PM launched Part 1 of the New Economic Model (NEM): NEAC is now focused on implementation planning

New Economic Model Report on the NEM



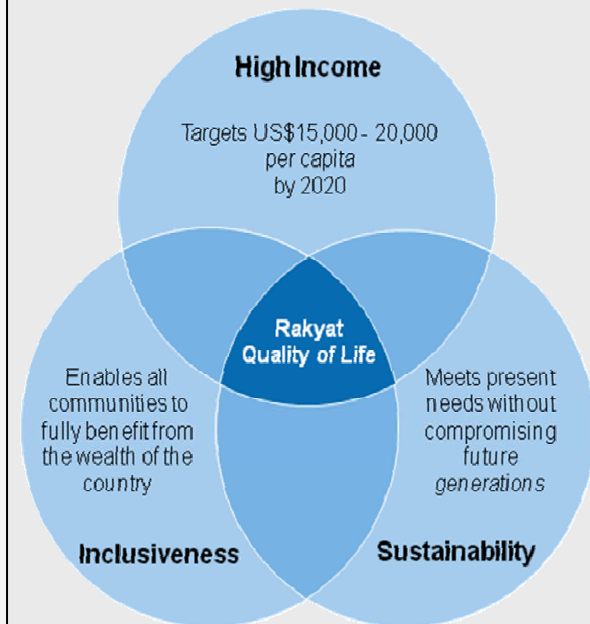
Economic Transformation Programme (ETP) Strategic Reform Initiatives¹

Coherent 'big push' to boost transformation and growth

Break logjam of
vested interests
through political
will and leadership

Prepare Rakyat for
change

1. Re-energising the private sector
2. Developing quality workforce and reducing dependency on foreign labour
3. Creating a competitive domestic economy
4. Strengthening of the public sector
5. Transparent and market friendly affirmative action
6. Building the knowledge base infrastructure
7. Enhancing the sources of growth
8. Ensuring sustainability of growth



Vietnam

- 41% of GDP in 2000 (targeted in the 2006-2010 5 Year Development Plan to reach 48% by 2020)
- 20% of employment in 2006 (targeted to reach 52% by 2020)
- In 2008/09 services expanded in line with GDP growth at about 8 % pa.
- Midterm Review stated that in Vietnam, services are dominated by petty trade and low skilled low value added activities to meet consumer needs
- Policy is focussed on creating an enabling environment for backbone and business support services

Cambodia

- Services account for 44.5 % of GDP (agriculture 32% manufacturing 14.9%)
- Cambodia is a net services exporter; Tourism activities account for 73% of total services income (2nd most important export after Garments)
- Services exports are 25 % of total exports in 2010, up from 14 % in 1994 (This is high by global standards especially for an LDC)

South Asia

- Service-led growth has mushroomed in South Asia, enabling South Asia to grow almost as fast as East Asia, but with a very different growth pattern.
- In South Asia, we are seeing a “Services Revolution”, ie a shift of activity directly from Agriculture to Services, by-passing so called “industrialisation”.
- Services are driving GDP growth; driving employment growth, driving export growth, driving productivity growth, driving poverty reduction and driving export performance.
- In South Asia, we are seeing an explosion of services, independent from manufacturing.

This is a new phenomenon. The transition to manufacturing is no longer the only development model?

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