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MODELLING THE POTENTIAL IMPACTS OF ECONOMIC REFORM IN A PARTNERSHIP BETWEEN AUSTRALIA AND CHINA

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Modelling the potential impacts of economic reform in a partnership between Australia and China

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Abstract

Effective economic reform agendas provide a means for promoting national economic growth, raising living standards and adapting to changes in trading conditions, new technologies and ways of working. Taking as a focus the Australia-China economic relationship, the GTAP model of the global economy is used to project the implications for Australia and China of preferential, unilateral and broader approaches to trade liberalisation, a broad agenda for reform across the services sector and financial market reform. The simulations show that reform strategies based on non-discriminatory trade liberalization and broadly-based concerted domestic reforms are likely to deliver substantive economic benefits and contribute to growth. Agendas that are restrictive, either through preferential deals between trading partners or through a narrow sectoral focus domestically are likely to constrain gains below levels that would otherwise be attainable.

JEL: F1, F3, F4, O4, O5.

The effects of any particular economic reform program are specific to the modalities of the program, the barriers to economic efficiency, as well as the structures of the economy involved and those of its trading partners. The modalities of a reform program can include reductions in border protection, trade facilitation measures, reductions in barriers to investment, mutual recognition of products and qualifications within economic regions and across national borders, service sector reforms and financial market reforms.

The magnitude of benefits from reform will also vary depending on many contextual factors including how broadly the reforms are applied, the scale of activities affected and how far they reach into the economy. The potential benefits from trade reform will be influenced by whether reductions in border protection are applied on a preferential or non-preferential basis. Services sector reform, which can reduce the resource cost of providing services to industry and consumers in the economy, can also increase the competitiveness of domestically produced goods and services on global markets. The opening up of merchandise and services sectors can provide additional leverage to productivity enhancing reforms in the services sector. Financial market reform will help the intermediation of savings to investments where they are most productive, improve access to capital and reduce the risk premium of capital investment generally.

This working paper provides three groups of generic simulations to illustrate the potential magnitude of reform benefits across three key reform areas:

- reductions in border protection distinguishing between preferential and non-preferential, and multilateral approaches through trade reform;
- improvements in productivity of value adding factors in the services sector through domestic policy reforms; and
- a reduction in the risk premium or impediments to efficient capital investment in China through financial market reform.

The simulations use the GTAP multi-region, multi-sector general equilibrium model of the global economy (GTAP, 2016), a model used extensively in assessing the impact of changes in trade policy settings on global trade, production and consumption. It applies the same variant of the GTAP model developed by the Australian Productivity Commission for its 2010 research report into bilateral and regional trade agreements (PC 2010a,b).

This working paper describes the modelling framework applied and, for each of the scenarios modelled, the projected impacts. The scenarios are intended to illustrate the scale of economic benefits potentially available from effective economic reform agendas, and to support the assessment of strategies, proposals and priorities for reform.

The paper supports the study of the economic relationship between Australia and China being jointly conducted by the East Asian Bureau of Economic Research (EABER) at The Australian National University (ANU) and the China Center for International Economic Exchanges (CCIEE). This joint study is examining and reporting on the medium to long-term prospects for the economic relationship between China and Australia.

Modelling framework

The GTAP model database used has 20 individual national economies with Australia and China shown separately, and 5 multi-country regional groups (see Table 1). There are 57 industry groups in each region — 14 Agriculture, forestry and fishing, 4 Mining, 24 Manufacturing and 15 Service industry groups. The policy scenarios, that is ‘shocks’, are applied to the model, with effects determined by the linkages between industries and regions, assumptions about the economic behaviour of firms and households, and national resource constraints.

The variant of the GTAP model used is a comparative-static model that compares the global economy with and without the changes applied, allowing for full adjustments across the economies. As the model is comparative-static, it does not seek to trace the path through time by which adjustment occurs or the length of the adjustment period.

The modelling adopts a longer-term perspective. Under this approach, it is assumed that labour is mobile between industries in each region in response to changes in the relative competitiveness of industries. Aggregate regional labour endowments are assumed not to be affected, in the longer run, by the policy changes modelled (that is, labour is modelled as fixed by the region in the model with real wages adjusting to clear regional labour markets). Agricultural land and natural resource endowments used in the forestry and mining industries are also assumed not to be affected by the policy changes modelled (that is, assumed fixed).

Table 1 Country/region mapping

<i>Regions in GTAP database</i>	<i>Code</i>	<i>Regions in aggregated database</i>
1 Australia	AUS	Australia
2 New Zealand	NZL	New Zealand
3 China	CHN	China
4 Hong Kong	HKG	Hong Kong
5 Japan	JPN	Japan
6 Korea	KOR	Korea
7 Taiwan	TWN	Taiwan
8 Indonesia	IDN	Indonesia
9 Malaysia	MYS	Malaysia
10 Philippines	PHL	Philippines
11 Singapore	SGP	Singapore
12 Thailand	THA	Thailand
13 Bangladesh	BGD	Bangladesh
14 India	IND	India
15 Rest of Asia & Oceania	ROA	Cambodia; Iran; Kazakhstan; Kyrgyzstan; Laos; Myanmar; Pakistan; Sri Lanka; Vietnam; Rest of East Asia; Rest of Oceania; Rest of South Asia; Rest of Southeast Asia; Rest of Western Asia
16 Canada	CAN	Canada
17 United States	USA	The United States
18 Mexico	MEX	Mexico
19 Brazil	BRA	Brazil
20 Rest of America	ROM	Argentina; Bolivia; Caribbean; Chile; Colombia; Costa Rica; Ecuador; Guatemala; Nicaragua; Panama; Paraguay; Peru; Uruguay; Venezuela; Rest of Central America; Rest of North America; Rest of South America
21 European Union (27)	EUN	Austria; Belgium; Bulgaria; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; Malta; Netherlands; Poland; Portugal; Romania; Slovakia; Slovenia; Spain; Sweden; United Kingdom
22 Russia	RUS	Russian Federation
23 Rest of Europe	ROE	Albania; Armenia; Azerbaijan; Belarus; Croatia; Georgia; Norway; Switzerland; Turkey; Ukraine; Rest of EFTA; Rest of Eastern Europe; Rest of Europe; Rest of Former Soviet Union
24 South Africa	ZAF	South Africa
25 Rest of World	ROF	Rest of Africa and the Middle East.

Source: PC, 2010b.

Capital stocks by region and industry are assumed to adjust in order to equilibrate regional industry rates of return on capital to their long-run steady-state value. Under this assumption, a reduction in costs such as from a productivity improvement, a tariff reduction or the availability of capital, would initially raise average industry returns to capital, ultimately leading to a higher capital stock and output. Capital of a regional economy would be reallocated between regional industries according to relative competitiveness.

All tax rates are held fixed with tax revenue and the ratio of tax revenue to regional income adjusting.

The results represent the potential changes given the theory of the model, and the industry and trade structure prevailing in the database which has 2004 as its reference year. This database abstracts from the effects of the global financial crisis and the terms of trade and investment boom affecting Australia and China. However, it does not capture the longer-term changes in the structure of the national and global economies over the recent past.

The modelling provides an indication of direction and scale of the impacts of possible policy proposals for the economies of Australia and China. Assessment of the potential impact of actual policy proposals and the time scale over which they would occur would require a detailed analysis of the actual policies and an assessment of the likely industry and trade structures over the implementation period.

The scenarios

Reduction in border protection

While tariff rates have been reduced from historically high levels in both Australia and China, remaining tariffs still raise the cost of imports to producers and consumers, protect higher-cost local producers and act as a drag on economic activity. Complex rules of origin in trade agreements increase business compliance costs and provide difficult to quantify protection for import competing activities in the trading bloc. Preferential arrangements divert trade from lower cost producers outside a trading bloc to qualifying producers within the bloc.

Against this background, five scenarios are modelled to illustrate the impact of strategies for reductions in border assistance. The first scenario models the removal of import tariffs between Australia and China on a bilateral preferential basis. The scenario is an outer envelope of possible gains. It assumes full removal of bilateral tariffs but no negative effects of rules of origin and other regulations to enforce preferences. The scenario does not seek to model the impact of ChAFTA which is subject to carve outs and product-specific rules of origin.

In the second and third scenarios, respectively, border protection in Australia and China is removed on a unilateral basis. The fourth scenario considers the potential benefits of an open regional trade liberalisation strategy that might be leveraged through an Asian framework agreement such as the Regional Comprehensive Economic Partnership (RCEP) under negotiation. For comparison, the benchmark of global tariff reductions is modelled in a fifth scenario.

The comprehensive recording of international trade in the GTAP model provides an appropriate basis for the modelling of these scenarios (box 1)

Box 1: Modelling of tariff reductions

The GTAP model treats tariffs as a tax on merchandise trade flows between economies. Because trade flows are recorded on a bilateral basis, the model has the flexibility required to simulate the effects of different trade policy scenarios ranging from preferential tariff concessions between trading partners, through to non-discriminatory tariff changes leveraged to unilateral, plurilateral and multilateral trade policy arrangements.

The GTAP model variable $tms(i, r, s)$ is the source-specific change in tax on imports of product i from region r into region s . The variable captures changes in the power of bilateral import tariffs and is naturally exogenous in GTAP simulations.

Equation IMPORTDEMAND determines the regional demand for disaggregated imported commodities by source region based on a CES function of import demand.

Source: GTAP Tablo code.

The border protection data included in the GTAP database is represented by the tariff revenue associated with the protection measure. The value of tariff revenue includes specific and ad valorem components. The tariff rates implied by the GTAP database broadly align with trade weighted customs tariff rates shown in the WB Development indicators (table 2). For Australia and China, the GTAP trade weighted measures exceed the WB measures, but are more closely aligned to the simple (tariff line) weighted estimates. The variation trade weighted measures reflects in part changes in tariff rates, indicated by the downward shift in the simple (tariff line item) weighted measure. It also reflects changes in import patterns since 2004 in response to scheduled tariff changes and broader trading conditions.

While the difference does not detract from broad analyses of trade strategies, it could limit detailed analysis of the impact of bilateral or regional preferential arrangements affecting between-country tariffs. An analysis of the full implications of tariff reduction scenarios and trade preferences would need to take account changing tariff rates, bilateral and global trade patterns, the impact of rules of origin and the take up of preferences as well as the extent to which exporters price up to the margin of tariff preferences at the expense of importers and ultimately consumers (Productivity Commission 2004).

Table 2 Estimated trade-weighted average tariffs

GTAP region	GTAP tariff rate		Customs tariffs trade weighted		Customs tariffs simple weighted	
		2004 ^a	2004	2014	2004	2014
		%	%	%	%	%
Australia	AUS	3.2	3.7	1.9	5.2	2.8
New Zealand	NZL	2.5	5.6	1.3	5.7	2.2
China	CHN	5.6	6.0	3.2	9.8	7.6
Hong Kong	HKG	0.0	0.0	0.0	0.0	0.0
Japan	JPN	3.2	2.8	1.2	3.3	2.4
Korea	KOR	5.3	9.2	5.2	9.1	5.2
Taiwan	TWN	3.8	na			
Indonesia	IDN	3.4	4.7	2.3	6.1	5.0
Malaysia	MYS	5.2	4.0	2.8	7.3*	5.2*
Philippines	PHL	3.3	3.0	4.4*	5.3	4.8*
Singapore	SGP	0.0	0.0	0.0	0.0	0.0
Thailand	THA	8.0	8.2	3.6	13.6	8.2
Bangladesh	BGD	16.8	15.3	8.2	18.2	13.8*
India	IND	12.8	22.8	6.8	28.7	8.6
Rest of Asia	ROA	7.1				
Canada	CAN	1.3	1.5	0.8	4.3	2.5
United States	USA	1.5	1.6	1.4	3.2	2.7
Mexico	MEX	2.7	3.0	5.4	10.2	7.3*
Brazil	BRA	6.2	7.6	7.8	13.9	13.7
Rest of America	ROM	6.9				
European Union	EUN	0.8	2.1	1.5	2.5	2.1
Russia	RUS	7.5	9.6	4.9	11.4*	6.8
Rest of Europe	ROE	3.1				
South Africa	ZAF	5.0	5.3	3.7	9.2	6.3
Rest of Africa and Middle East	ROA	11.3				
Correlation to GTAP		1.00	0.90	0.83	0.89	0.78

*Most recent prior year reported ^a Trade weighted ad valorem equivalents, calculated by dividing estimated tariff revenue by estimated value of imports (cif) for the data base year.

Sources: GTAP database quoted in PC, 2010b, Table 2.2; World Bank, 2016, *World Development Indicators*, table 6.6.

If full preferential merchandise trade liberalisation were achieved under the ChAFTA framework, the simulation suggests that modest output gains could be available to China and Australia. It could increase Australia's GDP by 0.22 per cent and lift China's GDP by

0.11 per cent in the longer run, all else remaining equal (table 3). This is the projected maximum possible gain under full implementation of a fully comprehensive ChAFTA agreement, not the gains from the agreement that is currently in place. It presumes that the two countries will move to 100 per cent bilateral liberalisation of their merchandise trade, full pass-through of bilateral tariff reductions to industry and consumers and that there are no negative productivity effects imposed by rules of origin or other regulations to enforce preferences. The ChAFTA agreement currently in place is in fact subject to carve outs and product-specific rules of origin and will not yield these gains fully. The measure can be regarded as an upper bound of gains potentially available from ChAFTA merchandise trade liberalisation.

Table 3 Simulated longer-run effects of reducing remaining tariffs to zero

<i>Simulation</i>		<i>Australia</i>		<i>China</i>	
		<i>GDP lib. gain</i>	<i>Share of world</i>	<i>GDP lib. gain</i>	<i>Share of world</i>
		<i>% change</i>	<i>Per cent</i>	<i>% change</i>	<i>Per cent</i>
T1	Australia-China bilateral	0.22	23	0.11	4
T2	Australia unilateral	0.56	60	0.03	1
T3	China unilateral	0.12	13	2.28	78
T4	RCEP open regionalism ^{a,b}	0.88	94	2.37	81
T5	World MFN liberalization	0.94	100	2.94	100

^a This RCEP simulation includes the negotiating parties: Australia, New Zealand, China, Japan, Korea, Indonesia, Malaysia, Philippines, Thailand, Singapore and India. The economies of the negotiating parties Brunei, Myanmar, Cambodia, Laos, Vietnam, are not separately identified in the variant of the model data base used and as such not included in the RCEP group. ^a Open regionalism refers to the case where negotiating parties reduce tariffs to zero on a most favoured nation (MFN) basis to *all* trading partners.

Source: Author's estimates.

By way of comparison, and to define the potential gains from using ChAFTA as a lever for broader regional and multilateral liberalisation, liberalisation through a comprehensive framework agreement, such as RCEP which is under negotiation, is modelled. As a broad benchmark of possible gains through trade liberalization, the potential benefits to Australia and China from global merchandise trade liberalization are projected.

If RCEP saw comprehensive merchandise trade liberalization based on open regionalism, Australia's GDP could increase by almost 0.9 per cent and China's by about 2.4 per cent, above levels that otherwise may apply. If all tariffs were removed globally, Australia's GDP could increase by a little over 0.9 per cent and China's by 2.9 per cent. Australia could achieve 60 per cent of that global merchandise trade liberalization scenario by unilaterally removing tariffs itself. China could achieve 78 per cent of the global scenario by removing its own tariffs. These scenarios illustrate the different magnitudes of potential gains under alternative trade policy strategies. The simulation results emphasise the economic strength of unilateral action to improve national competitiveness and the further gains that may accrue from concerted action towards open regionalism through a regional framework agreement. The actual gains that may be realized would depend on industry and trade structures across regions as well as other factors affecting the responsiveness of economies to policy changes,

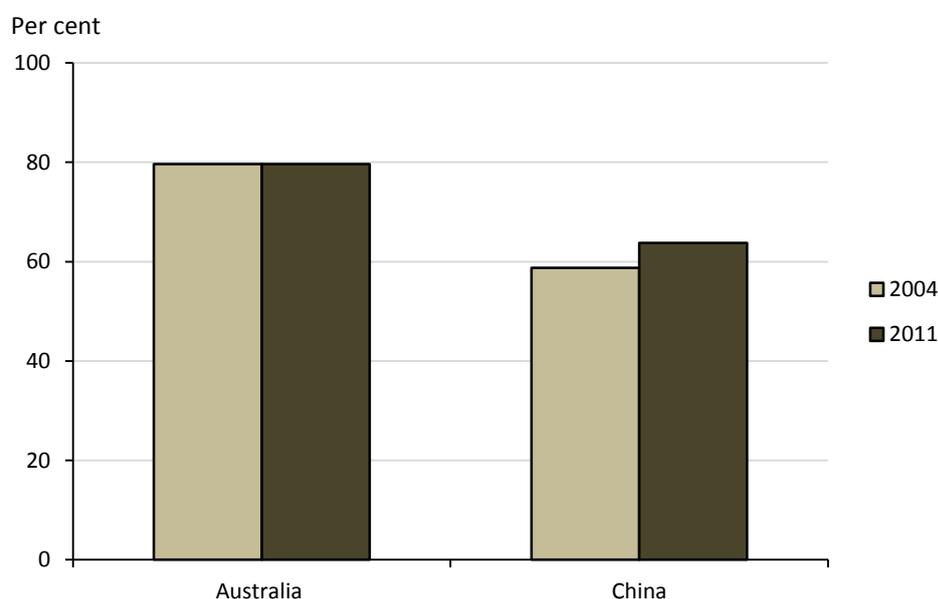
at the time of full implementation of the liberalization measure. The gains would also depend on the coverage of a framework agreement through which change is leveraged.

Services reform

Government policies and regulation of product and factor markets have a pervasive influence on the productivity of local industry. Regulations can enforce local content arrangements, product marketing arrangements, business arrangements, the conduct of economic activity as well as the movement of labour and capital between industries and regions. Well-designed regulation can enhance the functioning of product and factor markets, raising the productive potential of an economy. However, regulation that is unduly restrictive or channels scarce resources into higher-cost activities or ways of working lowers productivity and acts as a drag on economic activity and living standards.

Services contribute around 60 per cent of value added in China and around 80 per cent of value added in Australia (Figure 1). The contribution of services to the Australian economy is similar to that of other OECD economies, while services activities are of growing importance in China with its transition to a higher income more services oriented economy. Policies that remove impediments to productivity improving changes and service industry growth could provide economic benefits that are substantial and potentially larger than those that might accrue from merchandise trade liberalization.

Figure 1 Services industry value added contribution,^{a,b} Australia and China



^a Services industries include: Electricity; Gas manufacture, distribution; Water supply; Construction; Trade; Road and other transport; Water transport; Air Transport; Communications; Financial services, except insurance; Insurance; Business services; Recreation and other services; Public administration, defence, education and health; and Dwellings. ^b Value added includes returns to labour, land and natural resources and fixed capital.

Sources: GTAP data bases, 2004, 2011.

Because of the diversity of service activities ranging from utilities to finance, government business and personal services, productivity improvements across the sector would most likely be secured by a broad agenda, or agendas, of reform policies. The modelling considers a generic scenario to illustrate the likely economic effects of progressive productivity improvements across services activities. The generic scenario does not necessarily represent the effects of a single productivity improving policy or regulatory change, but rather agendas for change that collectively improve productivity. The modelling approach adopted is described in Box 2.

Box 2: Modelling of services industry productivity improving changes

The modelling assumes that productivity improvements are achieved through industry-specific technological and organisational changes. The changes are assumed to affect the value adding factors of labour and capital uniformly, for each of the 15 service industries included in the model: Electricity; Gas manufacture, distribution; Water supply; Construction; Trade; Road and other transport; Water transport; Air Transport; Communications; Financial services, except insurance; Insurance; Business services; Recreation and other services; Public administration, defence, education and health; and Dwellings.

The GTAP model variable shocked is $ava_{j,r}$, the value added augmenting technical change in all industries in region r and in industry sector j of region r , respectively. The variable is naturally exogenous in GTAP simulations.

Equation VADEMAND determines industry sector demands for the primary factor composite of land, labour and fixed capital using a CES function of primary factor input costs.

Source: GTAP Tablo code.

The modelling suggests that for every 1 per cent improvement in the productivity of service provision in China, GDP could be increased by 0.7 per cent with a small but positive flow on effect to Australia (Table 4). Equivalently, the same proportional increase in the productivity of service provision in Australia could generate an increase in GDP of 1.1 per cent with a likely negligible impact on the economy of China. It is likely that as China transitions toward a more open and services oriented economy, the dividend from productivity improving service industry reform agendas would rise commensurately.

Table 4 Simulated longer-run effects of a 1 per cent improvement in services sector productivity^a

<i>Simulation</i>		<i>GDP gain Australia</i>	<i>GDP gain China</i>
		<i>% change</i>	<i>% change</i>
S1	Australian services	1.13	..
S2	Chinese services	0.01	0.68

.. less than +/- 0.00 per cent ^a Modelled as a uniform 1 per cent increase in primary factor augmenting technical change across services industries.

Source: Author's estimates.

Projected national impacts of a uniform productivity improvement would be sensitive to the economic contribution of services. In particular, as the contribution of services to the Chinese economy increases, the potential impact of a productivity improvement in service provision would also increase. The estimates would also be sensitive to changes in the industry structure and trade exposure of the economy over time. The distributional effects across industries and regions would be sensitive to policy decisions concerning the realisation of efficiency gains, including in regard to service-price re-balancing where an element of price control or suppression has been followed.

Financial market reform

Financial market reform can help facilitate the flow of savings to the most productively efficient investments, improve access to capital and reduce the risk premium on capital finance generally.

Barriers to the efficient functioning of the financial system can arise for a variety of reasons including: ownership restrictions, government directives on the use of finance, domestic market practices and regulations favouring designated activities, as well as discrimination between foreign and domestic investors. Although the underpinnings of each type of barrier differs, the ultimate effect of any barrier to investment is to add to risk and raise the price of an effective unit of capital used in production, in the longer run.

Estimates based on different methods and pertaining to different reference years suggest that the rates of returns required in China are well above global benchmark levels, illustrated by those required in the United States (see Table 5). The wedges, however, vary between years with the prevailing economic conditions. Reported estimates for 1996 were taken at the time of the Asian Financial Crisis, while estimates for 2004 reflect conditions prior to the global financial crisis. Estimates for 2011 which are well below the estimates for the preceding periods reflect the effects of high levels of investment in China including infrastructure which may not have reached the pay-off stage.

Table 5 **Estimated rate of return wedges between China and the United States**

	G-Cubed 1996 ^a	GTAP model data base ^b	
		2004	2011
	%	%	%
China	4.15	5.08	2.12

^a Based on bond rate differentials after adjusting for model consistent expected exchange rate changes. ^b Based on returns on assets (net of depreciation) divided by the total value of assets expressed in US dollars, the numeraire currency in the model data base.

Source: McKibbin, 1999; GTAP databases.

Although the actual longer-run wedge may be difficult to determine, a reduction in the risk premium or a lowering of impediments to efficient flows of capital through domestic financial system reforms would, all else being equal, tend to lower required rates of return on

capital by domestic and foreign investors, encouraging new investment and reducing the wedge over time. A change in the wedge on capital investment is captured through a change in the expected after tax rate of return on investments (Box 3).

Box 3: Modelling of a reduction in financial risk and impediments to efficient capital flows

The effect of a reduction in financial risk and impediments to efficient capital flows is modelled through a reduction in the required rate of return on capital for a regional economy with respect to the regional source of funds. The modelling assumes that the change in the required rate of return is uniform across source regions. The version of GTAP used models the flow of funds between regions. It augments the standard GTAP model which channels funds between saving and investing economies through a ‘global bank’ (PC, 2010).

The GTAP variable shocked is f_rorc_r,s which is a shift term for $rorc_r,s$, the rate of return on actual capital in region r from source s . The rate of return in the model is calculated as the capital income net of tax as a proportion of end of period capital.

Equation E_rorc_2 determines the rate of return in region r , while equation $ROREXPECTED$ determines the expected rate of return on capital invested in region r as a function of the current rate of investment in region r .

Equation E_vGINV determines investment in destination region s of gross savings from source region r based using a CET function of expected returns.

Under the model closure, investment adjusts to equate the expected with actual rate of return for each region with respect to each regional source of funds. Under the comparative static approach adopted, the adjustment path is not separately modelled. A dynamic approach would be required to model the adjustment path.

Source: GTAP Tablo code, PC 2010, Appendix C.

The illustrative scenario modelled is for reform of the financial market in China to remove 50 per cent of the wedge between actual and benchmark levels, over the longer run. It is assumed that this change applies across domestically and foreign sourced capital on a non-preferential basis. The principles of national treatment and non-discrimination are also assumed to apply between foreign direct investment and portfolio investment.

In 2011 terms, a 50 per cent reduction in the wedge could amount to a permanent 106 basis point (1.06 percentage point) reduction in required returns (based on GTAP data), amounting to a 10 per cent reduction in the economy-wide rate return. This estimate is at the lower bound of the possible range suggested by available data. For example, benchmarking possible gains to 2004 data would suggest scope for a 254 basis point (2.54 percentage points) reduction in required returns, which would amount to a possible 17 per cent reduction in the economy-wide required rate of return through financial market reform.

If a 10 per cent reduction in the required rate of return were achieved through financial market reform, China’s GDP could be increased by 5.7 per cent above levels that would

otherwise be achieved, in the longer term (Table 6). After account is taken of an increase in net capital income accruing to foreign investors (who after reform would be expected to find China a more attractive investment location than competing destinations), gross national product (GNP) is projected to increase by around 5.5 per cent, above levels that would otherwise be achieved. As noted, these projections do not necessarily represent the effects of a single policy, but rather a concerted effort to improve the operation of the financial system for intermediating flows between domestic and foreign sources of funds and economically efficient uses of those funds in China, including through the entry of new businesses. The time horizon over which the benefits could be achieved would, in turn, depend on the pace of reform, the rate at which businesses took up new opportunities and the transition of labour to the new activities.

Table 6 Simulated longer-run effects of 10 per cent reduction in the required rate of return on capital in China^a

<i>Simulation</i>		<i>Australia</i>		<i>China</i>	
		<i>GDP</i>	<i>GNP</i>	<i>GDP</i>	<i>GNP</i>
		<i>% change</i>	<i>% change</i>	<i>% change</i>	<i>% change</i>
R1	Financial market reform in China	0.06	0.06	5.72	5.51

^a Modelled as a uniform 10 per cent reduction in the economy-wide required rate of return on funds in China.

Source: Author estimates.

While these projections provide an indication of the potential economic benefits of trade liberalisation and economic reform towards better functioning markets for goods and services and a more efficient financial system in China and in Australia, they do not directly capture all effects. Beyond reducing the risk of investment, for example, a well-functioning and efficient financial sector in China should also allocate capital to the most profitable firms and exert pressure on those firms to maintain high standards of corporate governance, affording additional possible industry-specific productivity benefits. Distributional effects within the Chinese economy could also follow, such as between government-owned or controlled sectors and other sectors, and between the Chinese economy and other economies. Overall, a lowering of investment risk in China would be expected to raise global economic activity and incomes.

Conclusion

Significant economic gains are available from trade liberalising, service industry productivity and financial market reforms. Trade liberalisation strategies based on a non-preferential modalities provide the most direct means of achieving the benefits of trade reform, with unilateral merchandise trade liberalisation potentially making available around 60 per cent and nearly 80 per cent of global liberalization gains for Australia and China, respectively. Bilateral preferential liberalisation, although potentially affording gains is subject to rules of origin and other regulations to enforce preferences and is the least advantageous trade liberalisation strategy. Comprehensive merchandise trade liberalization based on open regionalism leveraged to cooperation between trading partners would help close the gap between unilateral and global approaches.

Services industries comprise the largest share of the economies of Australia and China, with the share in China on the increase. An agenda for productivity improving economic reform across service industries could afford substantial economic benefits with a generic scenario suggesting that for every 1 per cent improvement in services industry productivity in China GDP could be increased by around 0.7 per cent. The same proportional increase in Australia could generate an increase in GDP of the order of 1.1 per cent. The prospective gain for China would increase as the importance of services in the economy increases, and as the services sector becomes more integrated with the global economy. Because of the diversity of the services sector, achieving productivity gains across the sector would most likely come from broad agendas for change.

Effective financial market reform would lower the required rates of return on capital, reduce the wedge between benchmark rates and encourage new efficient investment. If a 10 per cent reduction in the required rate of return from investing in China were achieved through concerted efforts to improve the operation of the financial system, the model projections suggest output and national income could be increase by 5 per cent or more, above levels otherwise attainable.

The simulations show that reform strategies based on non-discriminatory trade liberalising reforms and broadly-based concerted domestic reforms are likely to deliver substantive economic benefits and contribute to growth. Agendas that are restrictive, either through preferential deals between trading partners or through a narrow sectoral focus domestically are likely to constrain growth prospects below levels that would otherwise be attainable. They also risk concentrating benefits of reform to the targeted sectors rather than provide benefits that accrue widely across the community.

Within the framework established by this working paper, further research would be worthwhile into the links between individual reform proposals and potential economic gains, the distributional effects of potential impacts across industries, regions and population groups, as well as the time horizon over which reforms may be implemented and take effect. Against any reform proposals considered, such research could assess the ‘scope for improvement’, that is, the potential for further policy changes and the potential contributions to economic growth that effective reform could deliver.

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