ECONOMIC SCENARIOS.COM
Issue 12
Essential Economic Analysis for Strategic Thinkers

What's at stake from success or failure of the Doha Round

Key points

- Failure of the Doha talks could:
  - waste US$122 billion of the world's resources in 2010;
  - spike global inflation;
  - lower world trade; and
  - lower global investment.
- The real costs arise due to dashed expectations. Some liberalisation is already factored into decisions and asset prices.
- Success of the Doha Round, defined as a 50 per cent cut to existing barriers, would lift world incomes by 0.5 per cent per year above base and welfare by 0.7 per cent in 2020.
  - That translates into US$300 billion of extra real GDP and US$230 billion of real consumption.

ECONOMIC SCENARIOS
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Trade ministers deferred the hard decisions from the Hong Kong WTO meeting last week. Things should come to a head around March or April 2006. It could go either way. Europe could cave in on agriculture and developing countries give ground on manufacturing and services, giving a reasonable outcome overall. Or, the talks could collapse (again) in an acrimonious stand-off. Economists know that more liberal trade will boost economic growth and trade. But little is known about the dynamic and financial effects, which can be important since trade protection is uneven across the world. Even less appreciated is the impact of failure, since some expectations of more liberal world trade is already built into markets and investment decisions. The financial effects from freeing up trade, or failure to do so, can occur quickly as expectations come into play. These financial flows can, in turn, generate short-term counter-intuitive trade effects.

The Hong Kong WTO ministerial meeting held 13–18 December 2005, was supposed to settle the 'modalities' — the how and by how much — of the Doha Round of negotiations. But intransigence by Europe, and in particular France, over maintaining their Common Agricultural Policy (CAP) has so far prevented a meaningful outcome on agriculture. Agriculture has been made pivotal in the Doha talks because that is where the barriers to merchandise trade are the greatest (chart 1). The decision at Hong Kong to eliminate export subsidies for agriculture by 2013 is a 'nothing' decision. It offers just 2 per cent of the potential gains from liberalising all trade-distorting policies in agriculture.[1] Other countries, particularly developing countries, are reluctant to lower their barriers to trade in manufactured goods and services given the weak prospects for agriculture.

Barriers to services trade are particularly problematic in several ways. First, little is known about the barriers to services trade since they occur under various guises. Examples would be the non-recognition of degrees

[1] Anderson, K. and Martin, W. (eds) 2006, *Agricultural Trade Reform & The Doha Development Agenda*, World Bank, Washington, DC. It is estimated that 93 per cent of the potential gains from removing all trade-distorting policies in agriculture comes from removing barriers to trade at the border.

Using these scenarios

Nobody can foretell the future. If they could, they wouldn't tell you about it. These scenarios are not predictions or forecasts. To make profitable investments from this information you also need to decide how likely the events portrayed here are, and what is already priced in the markets. The value of this material is in the insights it offers into the economic effects of various possible events.

1 Version of the model used

The framework used is APG-Cubed model (Version 63A) and subscribers will be familiar with its features. The key points for the scenarios here for the analytical results besides the standard 'adding up' conditions (someone's surplus has to be mirrored in someone else's deficit) are that:

- agents are forward-looking and form expectations about the future;
- goods and financial markets are formally linked and integrated;
- authorities follow a modified Henderson-McKibbin-Taylor monetary policy rule that targets output and inflation (and exchange rates in East Asian economies);
- adjustment costs and 'sticky' labour markets are built into the model so that resource reallocation does not occur smoothly

Additional features of this version are the split out of the United Kingdom and India. Further explanation and to see a full description of the model, either follow the links on this website or directly access www.msgpl.com.au

and qualifications or visa restrictions on people movement. Second, data on services trade are under-reported in official balance of payments statistics, especially the services trade that occurs by the commercial presence of a company in another country. Third, is the difficulty of capturing the effects of the removal of barriers to services trade in an economic model. Mostly this is done by lowering costs in the services industry through a sector specific boost to productivity.

The static GDP and welfare effects from removal of barriers to trade in agricultural and manufactured goods has been well worked over. The World Bank[2] estimates that freeing all merchandise trade and eliminating agricultural subsidies would lift global welfare[3] by nearly US$300 billion a year by 2015. But that estimate does not include any dynamic effects, it does not include any endogenous productivity or effects from freeing up barriers to trade in services, despite the fact that services typically comprise 60–70 per cent of all activity in a modern wealthy economy (chart 2).

The World Bank's estimates are from a comparative static general equilibrium model, they do not report any effects over time and they do not allow for any financial effects. The model they use has no financial sector, nor does it incorporate expectations with forward-looking consumers and investors. This does not matter in the long run but it does impact on the short term impact and the dynamics of adjustment. The World Bank's estimates for failure of the Doha Round, although not explicitly stated would be zero since their baseline is 'business-as-usual' and they do not incorporate expectations.[4]

Financial effects and role of expectations

Financial effects from trade liberalisation are important on two counts. First, lowering barriers to trade alters the return on capital across industries and creates an incentive to invest (and disinvest) in certain sectors. Second, new investment has to precede new production and forward looking investors anticipate the new opportunities from the trade liberalisation, even though the removal of barriers to trade may be phased in — as they typically are. The first effects from freeing up trade are therefore changes in domestic savings and investment balances with surpluses and shortfalls made up by international movements of capital. These movements cause changes in exchange rates and current account balances.[5] Changing returns to capital also change real interest rates. Hence in this issue of *Economic Scenarios* we trace the possible financial effects from a potential successful outcomes from the Doha Round of

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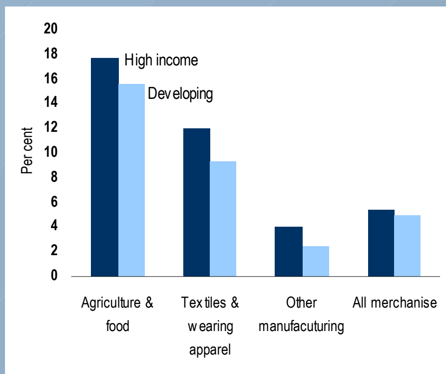
[2] Anderson, K. and Martin, W. (eds) 2006, *Agricultural Trade Reform & The Doha Development Agenda*, World Bank, Washington, DC.

[3] Welfare as maintained by 'equivalent variation' — a monetary measure of how much better off consumers are.

[4] Of course, in a semantic sense the 'cost' of failure of the Doha Round would be the opportunity cost of the potential US$300 billion foregone. The loss from dashed expectation are real losses in that real resources have been misallocated.

[5] More detailed effects on these dynamic effects from trade liberalisation can be found in McKibbin, W. 1999, *Trade Liberalisation in a Dynamic Setting*, paper prepared for the Second Annual Conference on Global Economic Analysis, Denmark, 19-21 June.

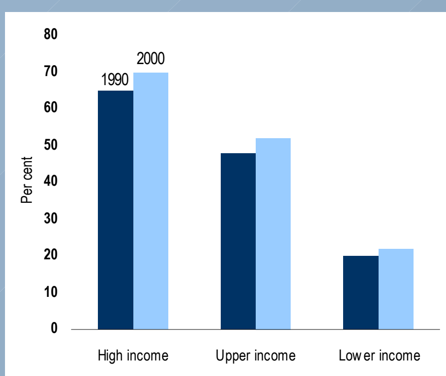
2 **Average applied import tariffs, per cent 2001**[a]



[a]Import-weighted, ad valorem equivalent

Source: World Bank

3 **Share of services employment, 2000**



Source: World Bank

negotiations from next year some time. The model used is the APG-Cubed model (see box 1).

A feature of the APG-Cubed model is that it formally incorporates forward-looking consumer and investor behaviour. Expectations are built into the model. That means, if investors and consumers already anticipate some freeing up of world trade due to the much publicised Doha Round of trade talks and those expectations are dashed, there will be a negative effect from a failure of the talks. The effects of success or failure from the Doha Round therefore depends on the baseline.

The relevant baseline

Investors and consumers will have some expectations of a cut in barriers to trade in goods and services given the widespread 'selling' of the Doha Round. Part of this selling and claims of large benefits is necessary to generate the political support for the launching of trade talks in the first place. The selling of the Round is also the means of securing a good outcome by buying-off the political resistance to change by beneficiaries of protection. The end result is that investors and financial markets are well aware of the Doha Round of trade talks and form some idea of the potential benefits.

But how much liberalisation is already factored into decisions and asset markets? A good place to start is to look at the stance of the majors.

The United States has advanced a proposal on agriculture that would see more than half of the potential realisable gains from the agricultural talks — one of the main areas of gain.[6] For manufactured (non-agricultural) goods, the US is seeking an 'ambitious' result.[7] For services, the US seeks 'commitments that substantially increase sectoral coverage, [and] provide truly meaningful market access …'.[8] What 'ambitious' and 'meaningful' are meant to be is not quantified. But the US describes its own proposal on agriculture as 'ambitious' so a 50 per cent cut in other areas is a reasonable assumption of US expectations.

The other major player in the negotiations is the European Union. As noted earlier, their proposal on agriculture is far less than that of the United States. Their agricultural proposal has been assessed as less than half that of the United States.[9] The EU's proposals on manufacturing and services are more ambitious, but given the nature of the negotiation, giving little on agriculture will mean receiving little from other countries on manufactured goods or services. The EU proposal could therefore be characterised as half that of the United States — say a 25 per cent cut.

Given the publicity, most pundits would expect something out of the Doha talks. But with the recent intransigence of the French within the EU

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[6] Bouet A., Mevel, S. and Orden, D. 2005, 'More or Less Ambition? Modeling the Development Impact of U.S.-EU Agricultural Proposals in the Doha Round', seminar to the German Marshall Fund of the United States, Washington D.C. December 1, 2005.

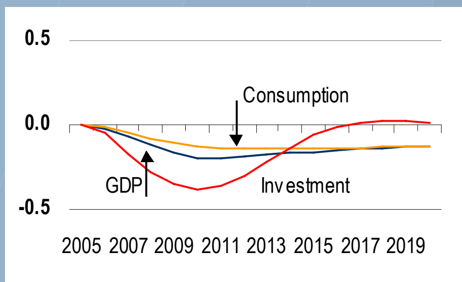
[7] USTR 2005 'Liberalizing Market Access for Manufactured Goods to Promote Growth', *Doha Development Agenda Policy Brief*, December.

[8] USTR 2005 'U.S. Seeks to Expand Trade in Services', *Doha Development Agenda Policy Brief*, December.

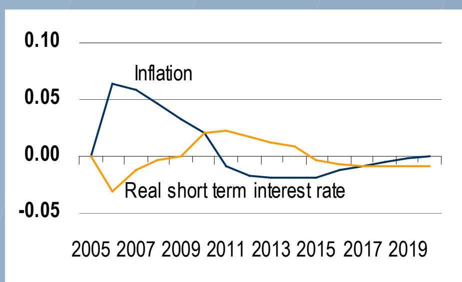
[9] Orden et al. 2005.

CHART 4: EFFECTS OF A FAILURE OF THE DOHA ROUND: UNITED STATES

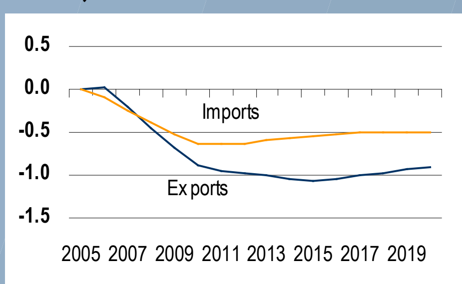
Real GDP, consumption and investment (per cent deviation from baseline)



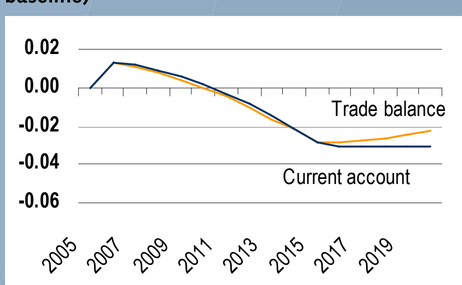
Interest and inflation (per cent deviation from baseline)



Exports and imports (per cent deviation from baseline)



Current account (per cent of GDP change from baseline)



over agriculture, a lowering of ambition to gain consensus is probably expected. This lower consensus is expected in the first half of 2006 in time to complete the administrative processes before US Trade Promotion Authority (TPA)[10] legislation expires in July 2007.

The Doha Round could still collapse as developing countries lock themselves into a position of demanding more on agriculture. The 'collapse' would take the form of running out of time to negotiate a deal before extension of TPA legislation is required. But the US President has lost popularity and any extension of TPA might come with so many strings attached (such as inclusion of labour standards in trade agreements) that the rest of the world, especially developing countries, walk away from it.

Another possibility is that the non-French Europeans are able to isolate France, and, realising that the WTO as an institution could fail, would match the US offer. If they did, most other countries would feel compelled to also match the US proposal. An unexpected good outcome could result.

The baseline therefore is one where a weak outcome, typified by the EU proposal, is achieved that amounts to a 25 per cent cut in tariffs across the board for all merchandise trade and a 25 per cent cut for barriers to services trade model as a cost reduction as described earlier.

A failure would be where the talks collapse and no reductions in barriers are achieved. Success would be achieving the US proposal.

Scenarios

To reflect the preceding discussion about the relevant baseline and variations, three scenarios are run.

1. A successful outcome from the Doha Round

A 50 per cent cut in support for merchandise trade (agriculture, energy, mining, non-durable merchandise trade and durable manufacturing) and services. Data on tariffs are taken from the GTAP 6 database and data on barriers to services are taken from scaling barriers to trade in services for Japan in proportion to manufacturing tariffs.[11] That is, a country like India, which is highly restrictive on industrial products is also assumed to be highly restrictive in services trade. The barriers on services trade for Japan come from a recent assessment of a possible free trade agreement between Australia and Japan.[12]

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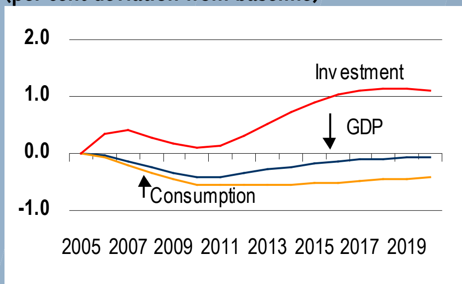
[10] Trade Promotion Authority (used to be called 'fast-track') allows the President to negotiate trade agreements and submit these to Congress on a 'take it or leave it' basis.

[11] A good description of applied tariffs in the GTAP 6 database is contained in Anderson and Martin, tables 12.13 and 12A.1. Strictly, cuts in tariffs under WTO rounds of negotiations are from bound rates which are typically much higher than for applied rates for developing countries. In effect, this means the simulated cuts for developing countries is greater than for industrial economies.

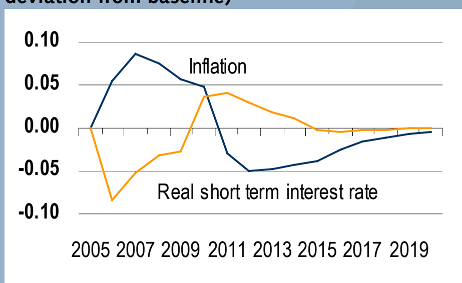
[12] Centre for International Economics 2005, *Australia-Japan Trade and Investment Liberalisation, Assessment of the Economic Impact*, a report prepared for the Department of Foreign Affairs and Trade, Canberra, April.

CHART 5: EFFECTS OF A FAILURE OF THE DOHA ROUND: JAPAN

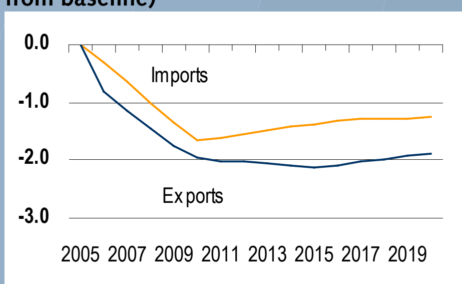
Real GDP, consumption and investment (per cent deviation from baseline)



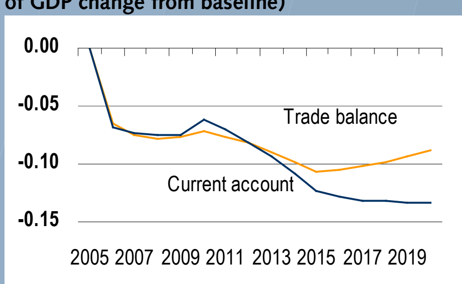
Interest rates and inflation (percentage point deviation from baseline)



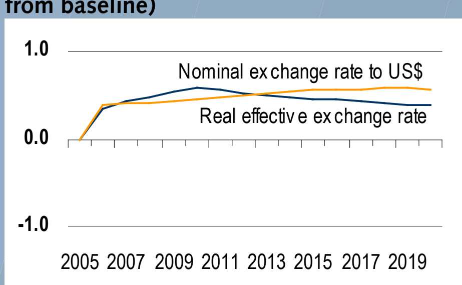
Exports and imports (per cent deviation from baseline)



Current account and trade balance (per cent of GDP change from baseline)



Exchange rates (percentage point change from baseline)



It is assumed that developed countries phase tariff cuts in over five years and to reflect special and differential treatment provisions for developing countries, their reductions are phased in over ten years.

To allow for all expectation to work through, results for 2020 are presented.

2. Successful liberalisation excluding services

Due to the dearth of reliable quantitative estimates of the barriers to services trade — let alone the uncertainty of any outcome — a simulation without services liberalisation as in scenario 1 is conducted. The contribution services makes to the total 2020 outcome is therefore shown separately.

3. The consequence of failure

Here we look at a collapse of the Doha talks from a baseline that anticipates a 25 per cent cut in protection across the board as described in scenario 1. The short-term dynamics are reported for this simulation for key countries.

Results

Scenarios 1 and 2

The real GDP and real consumption (a good measure of welfare) effects of a 50 per cent cut in tariffs in 2020 are shown in table 1. The results for 2020 are far enough out for all expectation effects to have been worked through.

Key observations are that all countries gain in terms of real consumption, some very large. Most of the large gainers are in Asia. Malaysia and Thailand are two large developing country gainers. India gains roughly twice as much as China but that could be expected as their barriers to trade are roughly double those of China.

Somewhat surprising are the large gains to Singapore and Hong Kong since these economies are already open and there are few cuts to tariffs or barriers to services. But these economies are important trade entrepots and as world trade expands due to fewer barriers to trade so they stand to gain.

Overall, the gain to world welfare in 2020 amount to US$230 billion[13] per year or 0.7 per cent higher than otherwise. The gains to real GDP for the world are US$300 billion per year or 0.5 per cent higher than otherwise.

Three quarters of the gains come from the liberalisation of services. That result is contingent on the simulation chosen and the earlier caveat is repeated here — there is a dearth of quantitative information on barriers to trade in services. But the point is clear: services are a large component of a modern economy and reducing barriers could see large gains. But

[13] In US 2002 dollars.

there has been hardly any progress in this valuable component so far in the Doha Round.

These results in table 1 are a snapshot of the long-term gains that may be possible from a successful conclusion to the Doha Round. More interesting to financial markets are the short-term dynamics.

Table 1: **Real GDP and welfare effects from a 50 per cent liberalisation: 2020** (per cent change from baseline)

	Cuts to barriers in merchandise trade		**Cuts to barriers in services trade**		**Total**	
Country	Real GDP	Real consumption	Real GDP	Real consumption	Real GDP	Real consumption
United States	0.0	0.0	0.2	0.2	0.3	0.3
Japan	-0.5	0.0	0.6	0.9	0.1	0.9
UK	-0.1	0.0	0.2	0.2	0.1	0.2
Europe[a]	0.1	0.1	0.3	0.3	0.4	0.5
Canada	0.1	0.1	0.2	0.3	0.3	0.4
Australia	0.5	0.1	0.6	0.8	1.1	1.0
NZ	1.1	2.0	0.4	0.7	1.4	2.7
Indonesia	0.5	0.5	0.2	0.4	0.7	0.9
Malaysia	2.2	2.7	0.5	0.7	2.7	3.5
Philippines	0.5	0.3	0.3	0.3	0.7	0.7
Singapore	1.0	2.3	0.2	0.4	1.2	2.7
Thailand	1.9	2.6	0.8	1.2	2.8	3.8
China	0.4	0.4	0.4	0.6	0.8	0.9
India	0.8	0.6	1.3	1.4	2.0	2.0
Taiwan	0.6	0.5	0.4	0.6	1.1	1.1
Korea	0.5	2.8	0.7	0.9	1.1	3.8
Hong Kong	1.3	1.4	0.1	0.2	1.5	1.6
Non-oil DC[b]	0.4	0.1	0.5	0.6	1.0	0.6
East Europe	-0.1	-0.1	0.2	0.5	0.1	0.4
OPEC	1.1	0.7	0.4	0.6	1.5	1.2

[a] Practically, this amounts to 'Continental Europe' but strictly is all other OECD economies not listed in the table.
[b] Non-oil developing countries.
Source: Simulations with APG-Cubed

Simulation 3: failure of the Doha Round

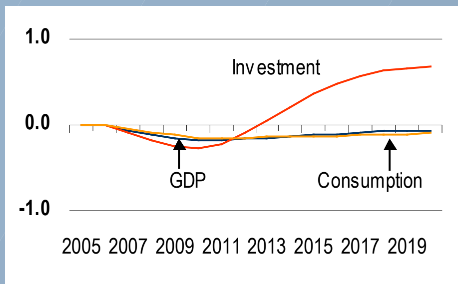
If the Doha Round of trade talks fail, then decisions already made by investors and consumers will turn out to be wrong. Too much will have been invested in some sectors in anticipation of the outcome from the trade talks and these positions will need to be unwound in light of the new information about failure.

The dynamic effects for the United States and Japan are different and are shown in chart sets 4 and 5.

The United States suffers a loss of investment if the expected outcome is not realised (panel 1 of chart set 4). This unwinding of capital positions causes a drop in real GDP and also real consumption as consumers realise their income stream is not going to be as high as before. The failure to lower barriers to trade and cut costs in services industries leads to a small short pick-up in inflation (panel 2 of chart set 4).

CHART 6: EFFECTS OF A FAILURE OF THE DOHA ROUND: UNITED KINGDOM

Real GDP, consumption and investment (per cent deviation from baseline)



Current account and trade balance (per cent of GDP change from baseline)

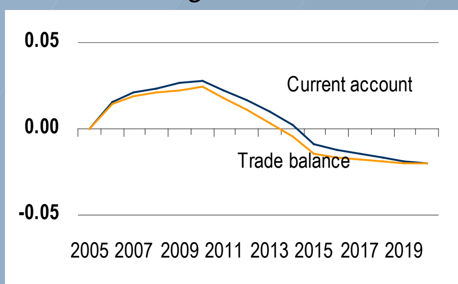
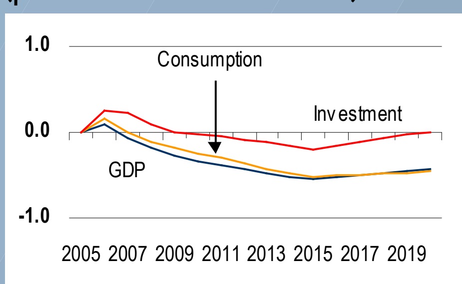
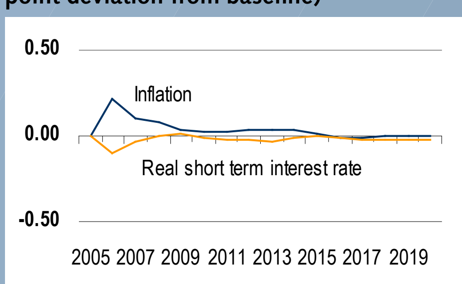


CHART 7: EFFECTS OF A FAILURE OF THE DOHA ROUND: CHINA

Real GDP, consumption and investment (per cent deviation from baseline)



Interest rates and inflation (percentage point deviation from baseline)



Since there has been no opening of trade, compared to the baseline which anticipated some market opening, exports and imports are lower than would otherwise occur (panel 3 of chart set 4).

With the new information that the trade talks have failed and the unwinding of investment positions there is no need for the US to import capital, in fact they become a small net capital exporter, relative to base. So initially there is a small improvement in the trade and current account balances of the United States (panel 4 of chart set 4). This improvement does not last long as the United States switches from being a capital exporter to a capital importer, compared to baseline.

Japan is also worse off if expectations are dashed. Real consumption and real GDP are lower than the baseline under which agents anticipated some market opening. But investment is higher than otherwise (panel 1 of chart set 5). The reason is that, under the expectations of lower barriers to trade, Japan lost capital to other countries where the returns on capital were expected to be even higher. There would have been a capital outflow from Japan, an increase in their current account surplus and trade balance. But now those flows are not realised, so compared to baseline there is a deterioration in the trade and current account balances in Japan (panel 4 of chart set 5) as the investment dollars, lacking any good returns offshore, stay at home. Reflecting this improvement in Japan's current account balance there is a small appreciation of the Japanese exchange rate of the order of 0.5 per cent from baseline (panel 5 of chart set 5).

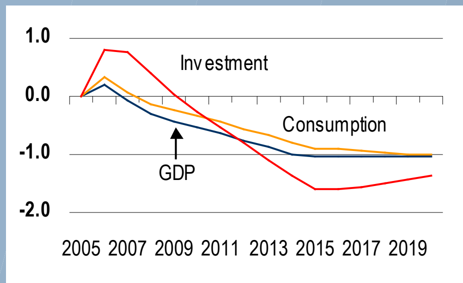
Some of the dynamic effects for the United Kingdom and China are shown in charts 6 and 7. The United Kingdom would have been a small investor at home initially had the talks been successful as expected. Later, as developing countries were expected to phase in their liberalisations, the United Kingdom would have sent investments abroad, chasing higher returns. But if the talks fail, there will have been too much investment at home and later no need to invest abroad. Hence, the UK current account initially improves then deteriorates compared to baseline as they switch from being a capital exporter to capital importer, compared to baseline.

China, like other countries is worse off when the talks fail (panel 1 of chart set 7). The interesting effect is the impact on inflation. The lower prices due to the removal of barriers to trade and cuts in services no longer happens, so there is now a spike in inflation in 2006 (panel 2) compared to the baseline where some lower costs were anticipated. Higher inflation than otherwise causes a dip in real interest rates.

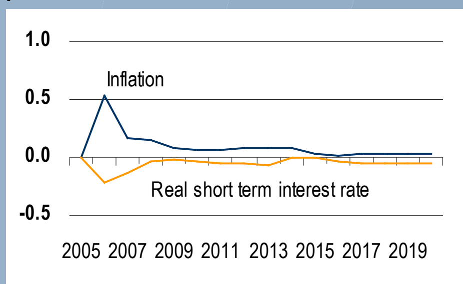
The final set of charts (chart set 8) shows the effects on India. India is growing steadily and has significant prospects due to a rising youthful workforce and prospects for removing high existing barriers to trade in merchandise and services. Initially, there is an increase in investment in India as there are no longer any favourable prospects abroad since other countries that were expected to be liberalising no longer do so. But, since India too is no longer liberalising under a failure of the talks, it no longer faces good prospects for higher returns on capital, so investments leave the country, compared to baseline, chasing better returns elsewhere. The changes in trade balances from baseline (panel 4 of chart set 8) reflect this switch. It is largely driven by the unwinding of investments abroad then at

Chart 8: Effects of a failure of the Doha Round: India

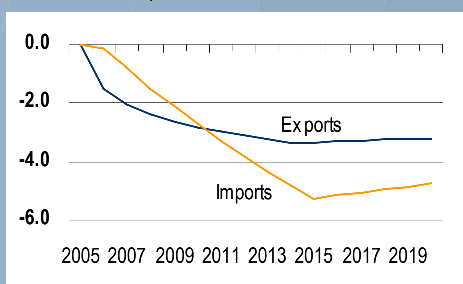
Real GDP, consumption and investment (per cent deviation from baseline)



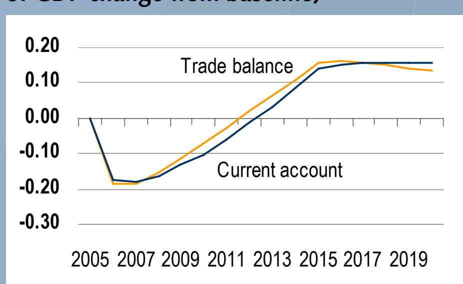
Interest rates and inflation (percentage point deviation from baseline)



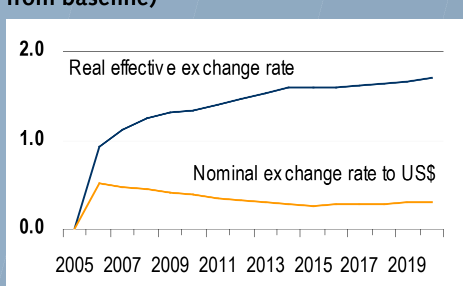
Exports and imports (per cent deviation from baseline)



Current account and trade balance (per cent of GDP change from baseline)



Exchange rates (percentage point change from baseline)



home due to the different expected phasing of cuts to barriers to trade for developing and developed countries. The size of India's initial tariffs drive the magnitudes shown.

Conclusions

A failure of the Doha Round of trade talks is costly for the world. It is not just the opportunity of higher incomes that are lost but real resources are used up under failure. The reason is consumers and investors form expectations about the future and make decisions today based on those expectations. Previous rounds of trade talks have witnessed lower barriers to trade and part of the 'selling' of the Doha trade talks has been the promotion of the benefits. There would be some expectation of lower barriers to trade that will already be factored into capital investments and asset prices. Just what might be factored in is extremely difficult to know but a modest to weak outcome would be close to what is expected. If the Doha talks fail, as they could, investors and consumers will react to the new information. They will realise their incomes will not be as high in the future as they thought and returns on investments will not be what investors thought either. There will be an unwinding of positions and this generates financial flows and ripple effects around the world. World real GDP could be US$122 billion lower than otherwise in 2010 if the talks fail. That is a real loss and not recoverable.

Also, inflation could be higher in 2006 under a failure of the talks. While minor for most countries it could be 50 basis points higher in India. Real exchange rates could be higher for some countries as well and could be 1 per cent higher for China. Exports and imports would be lower everywhere than otherwise under a failure of the talks. These negative effects come from a global framework that formally incorporates expectations in an integrated way.

An unexpected successful conclusion to the Doha Round, from say Europe changing course and adopting the United States position on agriculture, causing other countries to give ground, would boost world incomes by around 0.5 per cent per year by 2020 from what would otherwise occur. Welfare could be even higher and real consumption 0.7 per cent higher than otherwise. Three quarters of the gain could be from liberalisation of services trade, but progress in this area of the trade talks has been minimal, neither is there any political push for this aspect to be elevated as a priority.

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