This paper covers a lot of territory. Like the global economy itself, the paper is not perfectly integrated. But it has a lot to offer. The paper addresses three big questions on trade -- how globalized is the economy? what explains the increase in trade? and has the nature of trade changed? -- before moving on to some roughly analogous questions regarding finance.

When one asks: “How globalized is the economy?” one must immediately ask “Compared to what?”

Compared to mid-century, trade has clearly increased a lot. The ratio merchandise trade/GDP has doubled since 1971, and tripled since mid-century. It is now 9%, comparable to Japan and the EU15.

Compared to 100 years ago is the central theme of the paper. The comparison with 1900 is nice because of the upcoming millennium, and I would suggest a mention of the big “00” in the paper.

I agree that by now integration has attained a level above where it was before World War I. But I would not quite agree that this view is “iconoclastic.” It is, rather, the conventional wisdom among all non-economists, and perhaps among most economists as well. But it is true that it is a challenge to some things written by Sachs and Warner, Rodrik and Krugman and propounded in this room; so perhaps if these residents of Cambridge are icons, then the authors can call themselves iconoclasts.

Compared to perfect integration. Icons or strawmen? The comparison with 1900 is not altogether a bad straw man. But a good straw man needs to balance two attributes: enough straw that you can be sure of successfully knocking it down, but not so much that it fails to impress the crows. My favorite straw man here is complete global integration. How much farther do we have to go? (The paper at footnote 3 refers to “what remains to be changed....”) The point I wish to make is that it is not true, as we so often hear, that complete integration is already an accomplished fact, that firms trade with the other side of the globe as easily as the other side of town, that distance has died, or that we live in a borderless world. Nor have we even traveled halfway between autarky and complete integration. I base my case on a simple statistic. The US economy is 24 percent of Gross World Product. If it were in fact true that firms traded with the other side of the globe as easily as the other
side of town, the share of trade in US GDP would be the same as the share of non-US output in Gross World Product. Remember that 9% I mentioned? It is less than 1/8 of 74%. This implies we have traveled only one-eighth of the way from to complete integration.

**Services** The authors do an important service in pointing out the importance of services. The point enters the debate regarding the extent of international integration in both directions. On the one hand, the growing importance of traded services as a share of services production constitutes increased integration, as for that matter does the growing importance of trade in manufactures as a share of total production of manufactures. On the other hand, the big increase domestically in services as a share of GDP constitutes a decrease in the overall importance of international trade, in that services remain less-traded than goods. A definitive aggregate judgement is not possible because of the paucity of service data before WWII. But the statistic that service exports have risen by 2.4% of GDP since the 1960s, and the other information the authors adduce (essentially that service trade was as small as 0.2% of GDP before WWI), together imply that trade in goods and services together has roughly doubled from 6% of GDP 100 years ago, to 12% of GDP in 1997, a more decisive margin of increase than conventionally cited. As regards my calculation, the 12 per cent suggests that we have in fact traveled about one-sixth of the way from autarky to complete integration.

**What explains the increase in trade?**

**Lower government trade barriers** The fact that openness as measured by trade shares was until the 1970s lower than pre-WWI does have an important implication. It says that the biggest source of changes in the level of integration during the course of the century was government policies (since technological progress in transportation was a steady trend).

**Growth of emerging markets** I might add to the list of causes contributing to the rise of trade the strong post-war growth of a number of developing countries, especially those in East Asia. Empirically, rich countries trade more with other rich countries than with poor ones (which could be viewed as support either for the Linder hypothesis or for the Krugman-Helpman model of trade, and evidence against the Heckscher-Ohlin-Samuelson model). Thus the partial closing of the income gap between Asia and the West could explain some of the increased trade.

**Lower transportation costs** Physical shipping costs have continued to fall dramatically in the 20th century, including post-war. The reason is innovations, both managerial/ organizational (for example, the idea of containerized cargo in 1956) and technological (the authors are correct to emphasize that 1/3 of US exports now go by air, up from 14% in 1970, now almost as high a share of US exports as now go by sea.) But physical shipping costs are still quite relevant for many goods. One indication is cif margins, which range from 0.7% for pearls to 19.3% for fruits and nuts.

That geography is still important emerges clearly from the gravity model of bilateral trade: Distance, Landlockedness, adjacency, and language are all significant and robust determinants of trade. For example, every 1% increase in distance between two countries lowers bilateral trade by an
estimated .7%. Sharing a common border raises trade by an estimated 82%.  

Landlockedness cuts trade by about 1/3.  

But distance matters for lots of reasons beyond physical shipping costs. The authors correctly emphasize informational barriers to exchange, and this provides a conceptual link between the trade and finance sections of the paper. Informational barriers decrease with proximity, and with linguistic, cultural, historical, and political links. We might call it social distance. Linnemann (1966) called it “psychic distance” and Drysdale-Garnaut (1982) “subjective resistance.” One source of evidence is the tendency to geographic agglomeration even in industries where physical transport costs are zero: finance and computer programming.

There is also abundant evidence from the gravity model:
(i) the distance coefficient is higher for manufacturing goods than for agricultural commodities, even though one would expect physical shipping costs to be greater (per unit value) for the latter; (ii) the closure of the Suez Canal 1967-75 had an effect -- on trade for country pairs where ships previously had used the Canal route -- that, while significant, was less than one-fifth of the effect one would have predicted from the additional distance to be traveled; (iii) colonial links raised trade by two-fold to four-fold before the empires broke up in 1960, (iv) The effect of common language links is still to raise bilateral trade by one half; (v) federation break-ups such as Austro-Hungary, or reversals such as German reunification, have effects roughly on the order of fourfold, even when only a few years have passed; (vi) The home-country bias exhibited by all countries (that US gap between 12 % and 76%), after adjusting for such geographical factors as distance, remains large; (vii) Trade is impeded in crossing the Canadian-U.S. border. Gravity tests show an effect on quantity as large as 20. Tests of price variability show that crossing the border has a dampening effect on trade equal to adding 2500 miles’ in distance. The Canadian case is remarkable because trade barriers with the US are minimal -- not literally zero, but the same is true of barriers among Canadian provinces -- and one thinks of the two countries as being so homogeneous. Possible reasons why it makes a difference when two agents inhabit the same political entity include the effects of the legal system, education system, transportation network, advertising/media networks, and national retail chains. I would also emphasize the effect of exchange rate variability. The U.S.-Canadian exchange rate has been the most consistently-floating in the world.

Has the nature of trade changed? 

Is there more intra-industry? The calculation of the changing importance of intra-industry trade from 1909 to 1995 is one major contribution of this paper. I would judge the increase from 0.53 to 0.78 to be significant, though probably not as great as the conventional wisdom has it (a characterization that matches the finding that integration itself has increased over the period).

Is there more trade with developing countries? Here is another contribution. About the same share of US imports comes from developing countries now as in 1909, and this share is less
than half — 40%. US exports have shifted strongly toward rich countries. These statistics are even more of a challenge to the conventional wisdom, and even greater in their implications for some of the biggest policy issues. The issues I have in mind are the much-touted challenges that integration poses for sovereignty. Only in the first paragraph of the paper do the authors raise the questions “Does the growth of global markets pose a threat to distinctive national systems? Does a world characterized by high levels of trade and large international capital flows jeopardize social cohesion...?” Their interest in these questions really lies in the danger that popular worries along these lines will result in protectionism that halts globalization. (They suggest that this danger has not materialized and discuss why.) But I wish to emphasize the point that we might be able to allay concerns that many Americans have -- that globalization will undermine our high wages, labor standards, and environmental standards -- by pointing out to them that more than half of our trade (and FDI) is with countries that have higher labor costs and standards than us, not lower.

**Capital flows and crises**

It may be well-known to international finance experts by now, but it is worth repeating for general audiences that by some important measures, capital markets are not much more integrated now than 100 years ago. As the authors point out, net capital flows (current account imbalances) were larger before 1913 than today. Feldstein-Horioka tests, where time series or cross-section, don’t show the tendency for the saving-investment coefficient to decline during the course of the century in the way that one might expect (except that the addition of the 1980s reduced the coefficient for the case of the U.S. and other industrialized countries).

**Why is capital mobility incomplete?** The authors adduce several reasons.

**Information problems.** Local investors tend to know more. As an illustration, in recent emerging market currency crises, residents have exited faster than foreign investors. This claim is supported by data from the behavior of price of country funds.\(^\text{11}\)

**Contracting problems** An important area, which some Eichengreen architectural proposals have explored.

**Macro risks.** Exchange variability impedes financial integration just as it does trade integration. Here the authors mainly observe that the gold standard helped solve the problems that currency instability poses for capital mobility. Emphasizing currency problems as the source of incomplete financial integration (vs. default/political risks) is probably a minority view, but one I agree with. It is one reason why capital mobility (e.g., by the Feldstein-Horioka criterion) is higher among states or provinces within Canada or UK or Japan than internationally. It is relevant, for example, for the success Argentina has had, with its currency board, bringing down its interest differential. Or for Argentina’s decision it is considering now, whether to dollarize completely. Dollarization would eliminate Argentina’s (small) remaining currency premium, by definition, but I think it might also reduce its country premium.
Financial crises

The authors have assembled an impressive data set of currency and banking crises experienced by 21 countries between 1880 and 1998. This is just the sort of long time set that we need, in order to get perspective on some of the intractable questions posed by the most recent crises. Apparently the most severe crises on average are in the interwar period, followed by pre-WWI, with crises in the postwar period showing up as milder and with faster recovery times. Even when the sample is narrowed to emerging markets, the level of instability now does no worse than “match” that pre-WWI. One would think that this is because the current episode that began in Thailand in July 1997 has not yet fully entered the sample. But as bad as things have looked for the last 20 months, signs of incipient improvement in Korea suggest that it is still possible that the record in this crisis might turn out little worse than that of Latin American countries in earlier crises. The authors attribute the relatively positive comparison that emerges from the 10-year perspective to the effects of such modern institutions as the IMF and Basle Committee of Banking Supervisors.

Institutions

The institutions of international economic policy are important, in part because that is where we can have an effect. But the authors are in danger of exaggerating the importance of some of these institutions. I particularly have in mind the discussion of safeguards or escape clause. They list escape clauses as one of the three reasons (along with stable macro management and the rise of pro-trade economic interests) why we have been able to sustain support for an open trading system.

I accept the characterization that the intent of safeguards is to buy off some constituencies who are in danger of suffering the greatest adverse effects of trade liberalization and who are capable of blocking liberalization agreements (and I accept that part of this function could be described as insurance, and that the plan was successful politically in getting the original GATT approved). But I don’t think Section 201 is currently all that important as the safety valve that vents protectionist steam. Firms find it too difficult to satisfy the injury test. Section 201’s relative lack of use doesn’t bother me. But import-competing firms have turned to the Anti-dumping laws for protection in place of Section 201, because they are an easier route to protection, and this does bother me. If the Anti-Dumping provisions were explicitly labelled “escape clause,” that would not be so worrisome. The problem is that because they are called Anti-Dumping, journalists and the public infer that they have something to do with dumping. For example, they infer that these laws work to enhance competition rather than suppress it. Maybe we would not have to give up as much “steam” to attain our free trade goals if the public understood better what the game was.

But the broader message is one I accept: that the postwar system has managed generally to keep on a path of ever-greater trade, finance and growth, that international institutions have contributed to these trends, and that a century-long horizon helps to put the setbacks in perspective.


2. This and other statistics are from Frankel (1997).


10. Rousslang and To (1993) estimate that the domestic costs of distributing foreign goods add 13% to the costs of trade, beyond the 7% costs of tariffs and international transportation.