My co-author, Bernard Hoekman at the World Bank, and I are trying to push the Grossman-Helpman model as far as possible.¹ Basically, this is a very data-oriented paper. What we want to show, let’s say, what we want to focus on, are the emerging BRICs (Brazil, Russia, India, China and South Africa). We want to see whether these countries are welfare oriented as well as the extent of their welfare orientedness, and then review some unanswered questions, which are the really interesting ones. We see some of the issues and some of the problems and we’re giving some very realistic estimates, but these estimates raise more questions than answers, and I want to take you through our view, showing you how we’re trying to answer these questions.

So, are BRICs welfare maximizers? That’s the first big question that we want to answer. This is an important question because these are countries that are transitioning in several ways. Their political institutions are not those of liberal democracies, as we know the term from using it to describe the United States and Western Europe, and their institutions are young, emerging, so this is a very important question. Also, I want to show you that the welfare mindedness of these countries is not fixed at a point in time; that they actually vary over time, so all these things about them being young democracies and new institutions coming up all play into that very issue, and will be important for the next step that we want to take. This next step is very open-ended, so I welcome everybody in this room to try to solve some of the patterns we see in the data.

About the literature on this subject, the most important thing to keep in mind is that it’s very different when talking about manufacturing and when talking about agriculture. Because it’s so distinct and the concerning issues are very different, we choose for a completely different approach for both industries and we are going to do a separate analysis of them.

For example, I’m from India, where the population is very price-sensitive regarding agriculture products (for example onions), and the median voter spends a lot of their money on food; so, when food prices goes up, the government gets voted out. For this reason, these countries really take care of their median voter. They need to, otherwise they’re finished. But again, when analyzing the economies we have to take into account that agriculture and manufacturing have two completely separate

¹ Extracto de la sesión de comercio internacional organizada conjuntamente por la Universidad de Montevideo, la Universidad de la República, y el Banco Central del Uruguay, en el marco de las XXV Jornadas Anuales de Economía del Banco Central del Uruguay, 25 de Octubre de 2010.

# Professor and Roy and Helen Ryu Chair of Economics and Government, Bush School of Government and Public Service, Texas A&M University.

literatures and we should respect that.

So, let me tell you the negative aspect of the Grossman-Helpman model: it’s not good at explaining things like the ones I just explained. For example, why do governments of industrializing countries, like Brazil, maybe India, want to keep food prices down at all costs, and therefore, tax exports? You don’t see export taxes in manufacturing, not even in developing countries, except maybe for some resource goods, but generally not in manufacturing. As far as imports of agriculture are concerned, there are imports subsidies that follow the same kind of logic, but you won’t see them in manufacturing. The Grossman-Helpman model is no good at trying to explain those things. Actually, it has an explanation which is extremely weak. That’s what I see as a negative aspect of the Grossman-Helpman model: it’s a special interest model, so obviously it’s not going to explain things that are motivated by citizen concerns.

The idea behind the Grossman-Helpman model is a ‘94 paper, called *Protection for Sale*. It’s a nice paper, and if you forget about the money option, it’s a very simple paper, very intuitive; a bargaining model basically. It emphasizes the influence that special interests have on trade policy and, although it’s specific to trade policies, you can generalize it to other policies. So, the big question when you’re applying this model to BRIC countries is whether it applies to China or whether it applies to Russia, and what kind of special interest behaviors exists in these countries. If you’re really a scholar on China or Russia, you will hear that the nature of lobbying is different from that in Western democracies, but for sure there’s more and more literature coming out that says that there is a lot of lobbying going on in these countries. China and Russia have their own grassroots kind of organizations for lobbying, and they’re very, very effective. So, in China, much of the lobbying happens at the provincial level. Very briefly speaking, the federal government, or the central government, leaves the provinces alone if the provincial governments don’t mess around with their politics. Let me clarify that I’m not a China scholar, I’m just making these observations after having talked to people and read about it in the literature: at the provincial level there is a lot of lobbying going on because the provincial leaders and the governors of provinces have tremendous amount of economic power and they are the ones who actually interact with the central government. The Grossman-Helpman model is about money changing hands as much as another kind of lobbying, and we can suppose that there’s also money changing hands in this non-democracies, so we claim that the model can be applied to this economies, which is unfamiliar terrain for the Grossman-Helpman model.

The whole point of this paper is to come up with estimates of this model for agriculture and manufacturing, trying to keeping it simple, using it to shed light on the welfare of citizens at large. The more the government is not welfare oriented, then the “\(a\)” parameter in the government’s objective function of the Grossman-Helpman’s model is going to be lower, and the lobbies are really going to love it. In some countries it is very cheap to achieve that. The main equation of the econometric model includes: (i) a measure of protection such as the tariff, (ii) the import penetration ratio (imports over output), (iii) the absolute elasticity (if it’s imports, it’s absolute import elasticity and if it’s exports, it’s absolute export elasticity), and finally the degree of welfare mindedness of the government (parameter “\(a\)”).

Tariffs (and so protection) will be higher in a particular industry, the less the government is welfare oriented (the lower the parameter \(a\) is), the lower its import elasticity, and the lower the import penetration ratio of the industry.

For manufacturing, we can also include the pressure that downstream users of goods place on the government. For example, automobile producers will place pressure on the US government to have low tariffs on steel, because steel is an input for this industry.

Then we have the same model in agriculture, but a separate data set for agricultural goods. There’s this fantastic data set by Kym Anderson at the time he was at the [World] Bank for a couple of years
working in this project. His book has just come out, so we are using pretty state-of-the-art data — most of the barriers in the agricultural data are older measures; there are no subsidies, nor domestic price measures or domestic output restriction measures; these are mostly border measures. On the other hand, our manufacturing data is from Nicita and Olarreaga. This database has probably been the most cited of Marcelo [Olarreaga]’s papers. It’s a very famous database, a major service that Marcelo has done. We are also using I/O tables, which have about 55 countries, but I’m just going to show you the BRIC countries. Finally, for agriculture we used an Anderson et. al. database, and I really encourage you, if you’re working in the agricultural area, to use it. This database contains very good data on Uruguay, or at least that’s what Kym Anderson thinks. You might want to change his mind about that.

I’m not going to go any further with the model, so I’m going right to the results file. I’m going to show you about 4 or 5 graphs of my first set of results, that’s all we have time for, but if anybody wants this presentation I can send it to you, no problem. This graph shows data from China, India, Brazil, and South Africa. My Uruguay graph is missing, and that’s entirely my fault because Uruguay graphs are very interesting, especially on the agricultural side.

Figure 1: Parameter a (degree of welfare mindedness) from Grossman-Helpman model in Manufacturing

For Brazil, each data point is an “a” measure of the year, so each year is a cross section on Brazil in manufacturing, that I used for my estimations. And you can see some variation, but the database goes on for 2004, so it’s possible to find even higher values for “a”. Still, 50, 40, 30… this is quite prone to special interests. If you apply the Grossman-Helpman model to China blindly, then you would say that Chinese policy-makers actually sell off their representative consumer interest for fairly cheap. Nevertheless, it’s still not that cheap, their number it’s about 10, and always between 5 and 10. If you go to India, it’s about 10, and sometimes around 7, or 9, and that’s after 1990. If you look at the data before the Indian liberalization in 1990, it’s less than 1. So this is saying that liberalization is good for consumer welfare. And then South Africa has liberalized after 1993 - there’s a couple excellent papers on South Africa, I have some recommendations if you’re interested in that country— and it has stabilized around 30 or 35, but that’s without taking into consideration the lobbying by intermediates, as I’ve mentioned before.
But if you take into consideration the intermediates, you can see that there’s lobbying by all sectors throughout the economy and some final good sectors too. Comparing the results with the Grossman-Helpman model, the estimation of the parameter “a” has dramatically declined. For example, if you look at China the number is around 5; for India it is about 3 or 4, and South Africa is most of the time around 20, but it’s still much lower than that. As you can see, it depends on what you want to believe; I’ll go with these numbers, that’s my preferred estimate of what the a’s for the BRIC countries are. So, one of the things that you might want to ask is “why is there this kind of variation? What happened that there was this variation?” There’s not that much variation for India; there’s liberalization and that’s it. So India would go like this: it would go up, but then stabilizes. Different countries have different experiences, and that’s a question: why is that there is much variation?

Now, let me go through the estimations for agriculture. This sector is very interesting and for agriculture we also have data from Russia, though imports only. We’ve got imports and exports data for the other countries, and there is no negative protection; so there’s no export taxes and no import subsidies, because this model can’t handle that. So this is one possible extension for the future; to me, that’s the big gap in this literature. It’s how do we answer questions like that. For example, as you can see in the graphs, one way of looking at Brazil is that it really protects its agriculture, or you can say that it sells out its consumer interest for pretty cheap. I found this very interesting because that’s not India’s experience.
In this sense, India is much more welfare oriented and it doesn’t protect agriculture as much as Brazil does, so the NRA in agriculture is not a nominal rate of assistance in agriculture, but is a broader measure. Notice also that the a’s from agriculture are pretty high for India. So India can be seen as a welfare maximizing government, as far as agriculture policy is concerned. On the other hand, Brazil, China, and Russia cannot be seen as welfare maximizers. Uruguay is very welfare oriented, but not in all goods, so if you did this for some goods, it’s very surprising in this data that it would be about 5. So it’s not like 100 or 20 or 30, but it’s about 5, and there is variation over time; so I wish I had that graph to show you. It’s a very interesting graph. Finally, we can see that South Africa has become over time very susceptible to lobbying interests.

So, as countries become richer, they become more susceptible to lobbying interests. For example, if I’d put a USA graph over here, we could see that it’s very susceptible to lobbying interests in agriculture comparing to what happens in manufacturing. The reason is that the average American consumer doesn’t spend too much money on food, right? So they have no electoral issues with these things. They protect their sugar, their corn; they protect cheese, dairy products, and they’re not particularly good in these industries, but they can protect them without any danger to their electoral chances. A very similar thing is happening in South Africa, which is becoming richer, but it has the particular feature that its median voter isn’t, so it would be interesting to keep a close eye in what’s happening there.

If you take a look at exports -and again, this is only exports subsidization, there is no exports taxation data here- you can’t explain this phenomenon. Again, India doesn’t subsidize exports and it’s pretty welfare oriented, or so it seems. Instead, Brazil, South Africa, and Russia do subsidize their exports to a large extent, so we can say that these three countries are very prone to satisfying the interests of the exports lobbies. At least, that’s what the numbers show, and they’re fairly constant over time.
I’d like to make one final remark about the relationship between the changes we can observe in the estimations of the $a$’s parameters and the political regime. It would be interesting to analyze not only the BRIC countries, but also it would be interesting to analyze all Mercosur and all the South-East Asian countries, countries that are remarkable. What’s common in these countries is that they’re not fully established liberal democracies with contract mitigating institutions. They are not like the US and Western Europe, which have different institutions, and you can tell what’s going on these days in those countries. Apart from the French experience, you won’t see too many demonstrations in the streets, but I think that’s rather a cultural issue, I mean, going to a demonstration is no big deal, right? But the fact is that those kind of things had happened, let’s say, in India, and then the government would be out easily. So these not fledgling but emerging democracies, not necessarily emerging democracies but emerging countries in their political institutions, in their economic institutions, don’t have all the answers to conflicts, and when they don’t have all the answers, the politicians go for policies that try to maximize their electoral chances or to repress. Well, the worst or more extreme scenario would be the Chinese one.

The figure [Figure 5] basically shows that democracies and non-democracies have same distributions of a’s. So the question that really interests me is about institutions as delivering policy outcomes. One way to see it, is starting from the fact that politicians in all these countries are alike. I mean, you know, apart from their looks that are different, they all do what the institutions let them do. In other words, if in the United States the institutions were as fragile as in India, American politicians would behave like Indian politicians. What I’m trying to say is that they invest a lot of resources on campaigns for the elections, which I’m sure it’s really important at the end, but ultimately what ties down the politicians are the institutions, and that’s just it. Then, later on, the politicians behave like they have the power to influence, and they will or will not respond according to the current institutions, which may or may not constrain their power to do things, and depending on that constraint, good or bad things can take place.

So we’re trying to go beyond the Grossman-Helpman model, but the only other answer that I’ve seen, really theoretically cleanly, is another Grossman-Helpman paper, a 1996 paper about democratic institutions.4 Basically, it says that inside a legislature there’s legislative bargaining, there’s electoral competition. The political science literature has done some very good work, but still very seminal; it’s not developed very well and there’s still unresolved issues. As a matter of fact, the solution of a legislature problem with bargaining inside the legislature is a very hard problem. So, political scientists have given answers like “Ok, we put an agenda setter and that solves the problem.” I think it’s artificial, but it solves that old issue that people have spent 20 years trying to solve. There’s a whole electoral competition literature which emphasizes that if you want to get lobbying into the picture, then lobbying money has to help solve the electoral incentives issue, and therefore you need that some part of the population has to be not informed; so throwing ads at them will change their minds. You spend money on ads, you spend money on them, and they’ll work according to this money, and that’s the uninformed voting literature.

The Grossman-Helpman paper in the Review of Economic Studies is an uninformed voting paper, and there are very interesting empirical implications of this paper. For example, out of it you can actually connect institutions, like majoritarian voting systems, parliamentary voting systems, parliamentary voting, presidential voting systems, and map it to the amount of protection. So, we want to take this BRIC data and just try to see what we can come up with, because uninformed voting is very prevalent in these non-liberal democracies. And I’m sure uninformed voting is also predominant in the United States. So, you know, it’s probably relevant elsewhere too, but I think that’s the more fun step for us. Thank you very much!