
Background:
This symposium is organized by the International Labour Office within an ILO project entitled “Strengthening the Impact of Sectoral and Trade Policies”, which is financed by the European Union, and the University of Geneva within a project entitled “Globalization and Labour Market Outcomes in Developing Countries”, which is financed by the Swiss Programme for Research on Global Issues for Development.

Globalization is often presumed to be a powerful driver of economic growth and job creation. For this reason, governments of the world have been contemplating a broader role for international trade and investment in the Post-2015 Development Agenda. Important global fora such as the G20, whose members account for around 75% of world trade, are calling for domestic actions to support trade as part of national growth and employment strategies. However, the links between globalization and labour market outcomes, especially in developing countries, are still not well-understood in theory and practice.

This one-day symposium will address how the economic forces of globalization, particularly international trade, can lead to better employment outcomes in developing countries. For much of the developing world, integration with the global economy has created significant challenges in terms of handling adjustment dynamics and distributional consequences.

This symposium will bring together leading researchers to present cutting-edge analysis and evidence on how developing countries can leverage trade for both social upgrading and inclusive development, particularly more and better jobs.

Summary notes from the Symposium, held on 2nd of September 2015 at the ILO:

Welcome Note and Introduction:

- Terje Tessem (Director, Development and Investment Branch, Employment Policy Department, ILO):
  - Thanks the financial assistance from EU and the Swiss Programme for Research on Global Issues for Development.
  - Stresses the importance for ILO to gain a better understanding of the mechanisms through which trade impacts on employment and global labour markets. Notes that in 2008 the ILO has adopted the “ILO declaration on Social Justice for a Fair Globalisation” following the acceptance of this declaration by the representatives of governments, employers and workers from all ILO member States. This declaration reaffirmed ILO’s role in evaluating employment effects and in placing unemployment at the heart of economic policies. Since the 2008 declaration, ILO has published various studies on this issue, with the purpose of identifying existing tools and improving the understanding of the impact of these labour market policies on unemployment. However, so far most of the research has concentrated on developed countries, and there is a strong need to expand this research onto developing countries.
Acknowledges everyone for coming and for sharing in the enthusiasm for this topic. ILO will continue work and analysis of these issues on both global and country level. It will also provide technical support in this field to a number of countries, with the support of resources made available by the EU to complement the ILO resources. Notes that the knowledge and views shared in this symposium will be very valuable to ILO’s work in this area.

Thematic Session I: Trade and Informality

- Chair: Frederic Lapeyre (ILO, involved in the preparation of the “ILO Recommendation No. 204 concerning the Transition from the Informal to the Formal Economy”)

Introduces the session by noting that ILO has carried out significant work in studying the functioning of informal economies and economic units as well as in analysing the effective measures for transitioning from informal into formal sectors. On June 2015, ILO adopted the “Recommendation No. 204 on the Transition from the Informal to the Formal Economy”, whose main focus is to facilitate the transition of workers trapped in the informal sector through various incentives. Furthermore, this recommendation seeks to prevent the informalisation of jobs, especially following trade liberalisation. A large part of the policy guidelines of these recommendations is dedicated to policies regarding trade liberalisation and prevention of informalisation.

- “Trade Opening, Enforcement and Informality: Evidence from Brazil”
  Presented by Gabriel Ulyssea (Department of Economics Pontificia Universidade Catolica do Rio de Janeiro)

Abstract: In this paper we analyze the effects of a major trade liberalization episode on labor market informality. We exploit the Brazilian trade opening reform that took place in early 1990’s, when import tariffs and overall trade restrictions were drastically reduced across industries. Our results indicate that regions more exposed to the trade liberalization shock had a greater increase in informality, which was accompanied by a reduction in the formal-informal wage gap and a decrease in wages for both low and high-skill workers, the former effect being twice as strong. We also investigate whether different levels of enforcement of labor regulations lead to heterogenous impact of trade liberalization on informality. We find that regions adversely affected by the tariff shock that had more intense labor enforcement observed a lower informality increase relatively to regions that were also negatively affected but had lower levels of enforcement intensity.


Questions and discussion:

Marcelo Olarreaga (UNIGE): Firstly, I would like to make a comment regarding aggregate welfare. It is fascinating that despite observing this great progress on inequality, it seems that trade liberalisation has not contributed that much – it has increased both
informality and unemployment. So the question then becomes which of the two evils you choose to pick – informality or unemployment. Secondly, I also want to raise a question regarding the endogeneity of the enforcement. Sometimes the level of enforcement reacts to its environment (enforcement is higher if a given region is relatively better off) – could this endogeneity affect the results?

**Answer:** Regarding the welfare comment, all these results are relative so we cannot say anything on the aggregate level. It is possible that welfare in aggregate has increased. Regarding the second comment, indeed enforcement is endogenous. This is why we use an Instrumental Variable (IV) method. We instrument the enforcement by the number of total inspections per firm in a region.

*Marek Harsdorff (ILO):* Could you tell us which indicator you used to categorize the distribution of firms in informal sector into different types? And did you look at how trade liberalisation affected them each?

**Answer:** We used a survey of formal and informal firms in Brazil which contains production data, and combined it with firm micro data obtained from the Ministry. We then used the model to calculate the counterfactuals, and run the simulations to back out the relative size of the firms. In our case we need both sectoral and regional dimensions for identification, which is why we cannot identify the specific effects at the sectoral level.

*Ilise Feitshans (The Work Health and Survival Project):* Considering that there is a lot of organised crime in the informal sector – would you have any insight into data on criminality? We are searching for any data on criminal activities.

**Answer:** No, our data involves only legal activities – does not contain criminal activities.

*Patrice Laird-Grant (Jamaica Permanent Mission to Geneva):* Curious to see that agriculture sector is an outlier on the graph on page 24 of your slides. It seems that agriculture in particular is above baseline – is this because that sector was not liberalised? This is important since agriculture tends to be the industry that employs the largest part of unskilled and semi-skilled workers.

**Answer:** Agriculture did experience a small increase in tariffs after this period, but in Brazil this sector represents a very small portion of workers so it cannot be driving our results.

*Frederic Lapeyre (ILO):* Brazil is implementing new compliance mechanisms and enforcement policies. One of the reasons behind Brazil’s success is that they implemented innovative systems to tackle both dimensions of informality – both at the intensive and extensive margin (registration of firms and legalisation of workers) – it is a lesson that could and should be replicated in other countries.
“Trade Openness Effects through Price Channels on Firms’ Informal Employment: The Case of Peru”

Presented by Jorge Dávalos (Department of Business Administration, Universidad del Pacífico)

Abstract: This paper seeks to estimate the impact of sector specific international price shocks on informal employment demand. Such impact is specified by a theoretical model where law enforcement (regulation) is an important determinant of the formal-informal employment demand allocation decision. It is shown that trade-openness effects on informality are channelled through prices, thus the proposed price-informality multiplier is interpreted as a formal labour vulnerability to trade openness proxy indicator. By combining national accounts and labour force survey data the multiplier is estimated for a set of tradable sectors of the Peruvian economy for 2004-2013. The theoretical and empirical evidence suggests the presence of structural sector specific ‘informality traps’. It also raises awareness regarding the need of sector specific regulatory frameworks that could ease the regulatory burden at firms exhibiting structural proneness to formality.


Questions and discussion:

Marcelo Olarreaga (UNIGE): I find these results very interesting, especially the possibility of observing informality traps. It seems that the results rely strongly on high regulatory costs, which increase the incentives to go informal. How do you measure these regulatory costs, and what are the variations in the data which allow you to identify these costs? And if so, how high are these costs?

Answer: We do not observe regulatory costs of any kind. Peruvian Labour Ministry is very reluctant to share data on this. Instead we use a proxy to identify these costs – according to our theoretical model a good proxy for the costs is the interaction of size of informality and the probability of being controlled, in the spirit of the Wooldrige paper. Theory suggests that firms are more reluctant to hire formal workers if this would make them grow in size and render them more visible towards inspections. Indeed, if you had firm level data you could explore how firms of different size would react.

Marek Harsdorff (ILO): You present two different multipliers, and the results appear to be mostly driven by “multiplier 1.” I am wondering if the costs you include in “multiplier 2” affect the “multiplier 1” as well? In other words, if you increase regulatory costs, the price of production by firms should increase too – would this affect your results?

Answer: From a theoretical point of view there is no ambiguity, but empirically it is possible that there is some endogeneity. But we do use a traditional IV approach to control for this, and do not find any significant difference in the parameters.

Frederic Lapeyre (ILO): If we look at the case of Europe, which still struggles with undeclared work, it appears that the compliance mechanisms (ex. increasing labour inspections) are not linked to an increase in the number of sanctions, but are instead linked to an increase in preventive measures. Question is how do we increase these
incentives while still leaving enough time for transition? Then there is also the question of corruption - if you increase penalty fees in the presence of corruption, this will just result in an increase in corruption. Therefore, it would be interesting to take into account the effectiveness of the compliance mechanisms when estimating the propensity to move to informality across sectors.

*Answer:* Officials in Peru are very keen on estimating the effectiveness of enforcement mechanisms. Corruption is very high in Peru, and people are aware of the importance of increasing the effectiveness.

*Dale Honeck (WTO, Services Division):* I am looking at the issue of whether certain trading sectors are easier to bring into formality than others. There has been a lot of work on this issue specifically regarding the tourism sectors. Hypothesis is that it is easier to bring tourism firms into formality, because for instance they have to be listed online to access international tourists. In this sense, are there some sectors that are more easily than others brought into formality?

*Answer:* Yes, theoretically it would be easier to formalise sectors that are intense in high-skilled labour. But unfortunately, from evidence in Peru it does seem that there are certain sectors which are stuck in informality traps. Some sectors seem to be more affected by the price of labour than others.

*Gabriel Ulyssea (PUC-Rio):* For firms it is ultimately a cost-benefit analysis whether to go formal or not. As an incentive, you can either reduce the costs of going formal, or increase the benefits of going formal. In sectors that are small, benefits from going formal are too small so these firms have fewer incentives to switch. Similarly, if you increase competition in a certain sector, you reduce the benefits of becoming formal. Costs of being formal are numerous (taxes, etc) but the benefits are not that clear. If you are in a large supply chain, that would increase the probability of being formal (as the firms would need to issue receipts, etc).

*Boris Engelson (freelance journalist):* In both presentations we could see the workers, the firms, the regulators but we could not see the unions. Unions can play an important role, and we should be looking at them as well. Also, you both talk of highly skilled, highly productive workers: is this a synonym? In Switzerland I am not sure that the very expensive lawyers, etc, are necessarily more productive, but they are certainly more expensive. This is a fundamental question I'm trying to raise.

*Answer by Gabriel Ulyssea (PUC-Rio):* Unions are usually a major player, but in Brazil unions are not very representative of the workers, as by law they are not required to represent the interests of the workers. Also, unions come with formality. Once you have formality you automatically have unions – thus they become part of the costs and benefits of the formality.
Keynote Presentations: Trade and Inequality

- “Trade and Inequality: From Theory to Estimation”
  
  *Stephen Redding (Princeton University)*

  **Abstract:** While neoclassical theory emphasizes the impact of trade on wage inequality between occupations and sectors, more recent theories of firm heterogeneity point to the impact of trade on wage dispersion within occupations and sectors. Using linked employer-employee data for Brazil, we show that much of overall wage inequality arises within sector-occupations and for workers with similar observable characteristics; this within component is driven by wage dispersion between firms; and wage dispersion between firms is related to firm employment size and trade participation. We then extend the heterogenous-firm model of trade and inequality from Helpman, Itskhoki, and Redding (2010) and estimate it with Brazilian data. We show that the estimated model provides a close approximation to the observed distribution of wages and employment. We use the estimated model to undertake counterfactuals, in which we find sizable effects of trade on wage inequality.


- “Trade, Inequality and Costly Redistribution”
  
  *Oleg Itskhoki (Princeton University)*

  **Summary** (taken from the slides): Empirical evidence suggests that an increase in trade integration raises real income but also increases inequality and makes some worse off. However, standard approach to demonstrating and quantifying the gains from trade largely ignores such trade-induced inequality. In this paper the authors study the welfare implications of trade opening in a world in which trade affects the income distribution and in which redistribution policies are constrained by information frictions. In the model, trade increases inequality and redistribution needs to occur via a distortionary income tax/transfer system. Despite the fact that the tax system is progressive, trade still leads to an increase in inequality in the after-tax distribution of income. We therefore propose two types of adjustment to standard welfare measures: (i) a “welfarist” correction reflecting the preferences of an inequality averse social planner (risk adjustment under the veil of ignorance); and (ii) a “costly redistribution” correction capturing behavioural responses to trade induced shifts across marginal tax rates. Under plausible parameter values, the authors show that these corrections are non-negligible and that they eliminate about one-fifth of the (static) gains from trade.

  Link: [http://www.princeton.edu/~itskhoki/papers/TradeInequalityRedistribution_slides.pdf](http://www.princeton.edu/~itskhoki/papers/TradeInequalityRedistribution_slides.pdf)

Questions and discussion:

*Guido Porto (Universidad Nacional de La Plata)*: Question for Oleg: I have a project which is conceptually very similar to yours (we call it a ‘trade-epsilon’), we have a ‘mu’ (a prediction) of the model, and we recover a ‘rho’ which would make one indifferent between the two equilibria. We carry out this analysis for Africa, and we obtain an
extremely high ‘rho’ – in other words, we find that you would need an extreme aversion to inequality, not to observe any trade gains.

Answer: Very interesting. But in our case, with the non-parametric specification we cannot estimate the ‘rho’.

Gabriel Ulyssea (PUC-Rio): I would like to push the issue of informality: Including informality would further increase the effects you obtain: if trade increases informality, it would also increase inequality, but it would in addition also reduce the tax base. I understand that you only have formal sector data, but it would be interesting to include informality.

Answer by Steven: In terms of building in informality, it could be possible. Currently we assume full employment; all effects are through the wage inequality. We could model informality through the channel of unemployment, as was done in some of the previous papers.

Answer by Oleg: Yes indeed, we could include informality; it would play on the progressivity of tax schedule feature of the model.

David Cheong (ILO): My first question is for Steven regarding the graph on export employment share – if you would calibrate the model for different countries would you get different results (a different shape of the curve)? Second question is for Oleg - does your model assume away lump sum taxes?

Answer by Steven: The ‘Inverted U’ curve is a very robust feature across countries. We did calibrate it for Colombia and it looked very similar.

Answer by Oleg: There are no lump sum taxes, but again their effect would play through the progressivity of the tax schedule.

Thematic Session 2: Trade and Workers' Skills

• "Do Multinational Firms Transfer Culture? Evidence on Female Employment in China"

Hei Wai Tang (Johns Hopkins University)

Abstract: This paper studies whether multinational firms’ transfer corporate culture across countries, revealed by foreign affiliates' and local firms' preferences for female workers. We build a parsimonious task-based model that features heterogeneity in firms’ productivity and biases towards female workers. The model features women having a comparative advantage in skill-intensive versus brawn-intensive tasks, and multiple sectors that differ in their dependence on these tasks. The model predicts that an increased prevalence of foreign firms in the market induces discriminating firms to increase female employment, due to competition as well as learning.

We then confront the model predictions using manufacturing firm data from China over the period of 2004-2007. We find that foreign-invested enterprises (FIEs) from countries with lower gender inequality tend to hire proportionately more women and are more likely to appoint female managers. Domestic firms increase their female
employment in response to the presence of FIEs. This cultural spillover is stronger in sectors in which women have a comparative advantage and from FIEs whose home countries are less biased against women. We find little evidence showing that competition is the main channel, suggesting the importance of imitation. Our results reveal an under-explored externality of FDI, beyond technology spillover.

Link: 

Questions and discussion:

Mina Baliamoune (University of North Florida): This is a very nice paper, but it seems that it gives women both good and bad news. When firms are coming from “good” countries this would have a positive impact on gender equality. However, bad news is that if companies are coming from gender-unequal countries; in this case would we observe the opposite effect? What happens with Chinese companies coming to Africa? This would be an interesting issue to study.

Answer: According to our model, domestic firms will adopt any practice as long as this practice is profit maximising. Are there any profit-maximising practices that Chinese firms are doing that the African firms would want to exploit? In another paper I study a similar issue, and I find that Chinese firms are very profit driven (and not politically driven as it is generally believed).

Marcelo Olarreaga (UNIGE): My question is regarding the identification. Couldn't we think of a world where firms are changing their policies (employing more females) and then consequently attracting more FDI?

Answer: My understanding is that in China most of the FDI is through the arrival of new firms, and very little through acquisitions, so this shouldn't be an issue.

Yvonne Theeman (Friedrich Ebert Foundation): What about precarious employment? Do you have any information on how long these women stay employed? Is this a long-term employment or just a short-term snapshot? Obviously reproductive health issue is something UNDP is looking at: leaving workforce for a short period can have a very large impact. It also affects the pension since working period for women is shorter.

Answer: This is a very good question regarding the retention of female workers. Unfortunately our panel is too short, so there is very little we can say. We do have a separate household survey dataset that we are analysing currently for wage inequality which could provide some answers. But anecdotal evidence so far suggests that this is a long-term effect.

David Kucera (ILO): Developing countries are known to have very strong export cycles. How do firms adjust to these large swings in employment cycles, and would the adjustment be different for local and foreign firms?

Answer: Again we do not have any data on this, but anecdotal evidence suggests that Chinese firms use a lot of informal, temporary workers when making adjustments. There is no data on this, but it's very unlikely that this is driving our results.
“Wage and Employment Gains From Exports: Evidence from Developing Countries”

Nicolas Depetris Chauvin (Haute Ecole de Gestion de Genève) and Guido Porto (Universidad Nacional de La Plata)

Abstract: We systematically explore the relationship between exports, employment, and wages in developing countries. Using a combination of firm level data for most developing countries and cross-country, industrial-level data, we quantitatively document the potential gains from export opportunities. On the export market side, we investigate the role of product quality demanded by foreign markets and the mechanisms by which quality is produced, specifically the demand for high quality, skilled labor, and the demand for high-quality, imported inputs. On the firm/industry side, we explore hypothesis related to productivity and technological efficiency.


Questions and discussion:

Marcelo Olarreaga (UNIGE): I'm wondering if the rent sharing mechanism might be an explanation for higher wages. A competing hypothesis is that there are no skills at all, but that firms would have to share the profits.

Answer: This would invalidate our model indeed.

Hei Wai Tang (Johns Hopkins University): Is there any room for policy intervention if the country wants to increase the quality of goods in its exporting sectors?

Answer: We carried out this analysis for a different set of countries, and the mechanism doesn't seem to be functioning for low income countries. So there might be some room for helping firms with skill acquisition. It is possible that firms in low income countries do not have the supply of skills they need, so perhaps an effective policy would be to improve the supply of skilled labour.

Con Gregg (ILO): How do you define blue collar vs engineer, skilled vs unskilled workers?

Answer: Indeed there is a gap between what we can define in the model and what we can observe when we move to the data. In the data we can observe whether the firms hire managers, engineers, or services workers. And we can observe if the workers are skilled in terms of the education that they have. But we cannot differentiate skills within each education band. We therefore associate skills with managers, engineers etc. And we define blue collar workers as the less educated workers, who have less than a given number of years of education.

Naoko Otobe (ILO): In your paper you are carrying out the analysis on a mix of middle income countries and developing countries, where the composition of industries is very different. If you only focused on a given set of countries or on a given set of industries –
would you obtain different results? Different skills are needed for production in different sectors, so does it make sense to mix them all in one analysis?

*Answer*: We did a wide range of this type of experiments. For example, intuitively we would expect that quality upgrade mechanisms should work better for industries with a larger scope for differentiation. So we reran the analysis by splitting the sample across industries, and indeed we find that the effects are higher for industries with a higher scope for diversification. Similarly when we split the sample across countries, results work better for middle-income countries, and less so for low income countries. These robustness checks are included in the paper, but could not be presented today due to the time-constraint.

**Thematic Session 3: Trade Agreements and Labour Markets**

- **Trade Unions’ Rights and Labour Provisions in Preferential Trade Agreements**
*Damian Raess (University of Geneva) and Dora Sari (University of Geneva)*

**Summary** (supplied by the author, please do not quote without permission): The paper/presentation explores how, if at all, the design of PTAs with respect to labor provisions influence state compliance with labor rights. It is particularly interested in the role and effectiveness of labor-related cooperation provisions. Using the DESTA dataset, preliminary analysis suggests that that state membership in PTAs that include cooperation provisions over labor and, especially, over FACB (freedom of association and collective bargaining) are positively correlated with the reduction of de jure but not de facto violations of fundamental trade union rights.

**Questions and discussion:**

*Boris Engelson (freelance journalist)*: I will not challenge what has been said, but I will challenge a few of the underlying assumptions that have been made. What is the opposite of the workers’ rights? Is it workers non-rights or non-workers’ rights? In a world of full employment this is not an issue, but in the presence of unemployment these become very opposing forces. What one would call dumping is for others a fair-chance situation.

*Answer*: In this study, we are interested in seeing whether PTAs with labour provisions undermine the number of jobs, and not only the quality of jobs.

*David Cheong (ILO)*: I would like to know how you define ‘de-jure’ versus ‘de-facto’ violations. Because in your paper you find that subscribing to labour provisions leads to a reduction in de-jure but not in de-facto violations; however, another paper found that if a country subscribes to labour provisions it also tends to ratify more labour legislations.

*Answer*: We define as a ‘de-facto’ violation when a country has a law which is very similar to what ILO prescribes, but on ground has a very different situation. The most obvious source of information here is the national law. So obviously there might be some lag there with respect to what’s happening on the ground.
Naoko Otobe (ILO): In poorer countries where industrialisation is still in progress many countries have adopted policies to attract FDI by setting up specialised zones. So perhaps you find no effect because the countries sign up to PTAs only having in aim production from specialized zones.

Answer: Certainly there are some limitations in our data. We can't capture the effect on the frequency of violations, as our variable of interest is binary – for example, an arrest is only coded as a dummy if it has happened, but we can't observe the number of times this event has occurred. What we do find through other datasets is that the frequency of these violations has decreased, but we don't capture this currently with our dummy variable. We do look at export-processing zones and exclude them from some analyses in the paper, but you are right that this is definitely an important aspect and subject for further research.

The Distributional Consequences of Preferential Trade Liberalization: Firm-Level Evidence

Leonardo Baccini (McGill University), Pablo M. Pinto (Houston University), and Stephen Weymouth (Georgetown University)

Abstract: The past few decades of international economic relations have been characterized by tariff reductions offered on a discriminatory, or preferential, basis. Concurrently, supply chains have gone global: to lower costs, the most competitive firms conduct different stages of the production process in different countries. We contend that these two historic transformations in the global economy are deeply interconnected. Specifically, this paper argues that lower preferential tariffs increase trade among the largest and most productive firms. We test our argument using firm-level data covering the near universe of U.S. foreign direct investment as well as disaggregated tariff data from preferential trade agreements signed by the United States. We find that preferential tariffs reallocate economic gains to the most competitive firms, leading to sharp increases in market concentration in partner countries. The primary beneficiaries of the recent wave of preferential liberalization are a small number of the largest and most productive firms.

Link: http://faculty.msb.edu/sw439/documents/BPW.pdf

Questions and discussion:

Marc Bacchetta (WTO): What do you observe regarding the behaviour of larger companies towards other non-tariff measures? My feeling was that they are fighting for the introduction of these non-tariff measures, so that your result is a bit counter-intuitive.

Answer: That is indeed what we find in a recent paper on lobbying. Multinational companies do lobby for these other non-tariff provisions. However, they mostly lobby for intellectual property rights, and this is mainly driven by pharmaceuticals. Most other non-tariff measures are not so central to trade.
Marcelo Olarreaga (UNIGE): I find that it is not surprising that you find bigger effects for larger firms because you are looking at a variable tariff costs. Perhaps you should be looking at other measures, such as reduction in the fixed costs (ex. information on accessing foreign markets), which might impact smaller firms more.

Answer: We specifically compare the industry with tariff cuts and the industry without tariff cuts. To look at reduction in fixed costs, I would need a different model (for example, by modelling the protection of investment which would be a form of a reduced fixed cost). However, this would be more of a theoretical exercise.

Marcelo Olarreaga (UNIGE): Is it also possible that some of these least productive firms might not have benefited, but that their headquarters in the US would have benefited? So that perhaps you are not capturing the full benefit on the small companies.

Answer: True, but in the paper we show that this effect also holds if you look at productivity at the headquarters. It is striking that even amongst the pool of these very selective MNCs there are many of them that are losing.

David Cheong (ILO): Could you speak more about the effect you find on the local Vietnamese firms?

Answer: The test we carried out regarding local firms in Vietnam was very controversial which is why we didn’t include it in the current version of the paper. My intuition is that the redistribution should be even more severe amongst local companies. Indeed we do find that the redistribution effect is very severe for local Vietnamese companies. But the results are very partial, as the data is only on household level.