THE BROOKINGS INSTITUTION

SOCIAL HEALTH INSURANCE RE-EXAMINED:

NEW EVIDENCE ON IMPACT FROM EASTERN EUROPE

AND CENTRAL ASIA

WITH ADAM WAGSTAFF
LEAD ECONOMIST

Washington, D.C.

Wednesday, November 7, 2007

ANDERSON COURT REPORTING
706 Duke Street, Suite 100
Alexandria, VA 22314
Phone (703) 519-7180 Fax (703) 519-7190

P R O C E E D I N G S

MR. WAGSTAFF: Thank you. It's great to be here. I'm not going to talk too much about equity today. I want to look more at some of the aggregates, system-wide effects of social health insurance. And a region that's been busily transitioning to such a health insurance during the 1990 case, or in some cases transitioning back to social health insurance, because prior to the Second World War a lot of these countries had a social health insurance system, Bismarck insight system. And some of them sort of were given this system as a gift by the Germans during the occupation. But (inaudible) prior to the Second World War, but certainly prior to Communism and the launch of the (inaudible) national system.

This is joint work with Rodrigo Moreno-Serra and country to what some people say, not "seronic" crusade to scrap social health insurance everywhere in the world or (inaudible) roll back the clock in China

to the era of the (inaudible).

But I do think we need to think hard about what are the benefits and costs of different ways of financing delivery of health care. Some of the ideas that get floated around like practicing provider splits sound very attractive on paper and that's certainly something that is very much a feature so as to help insurance systems, but I think that we need to acknowledge that there are costs associated with that. These transactions cost (inaudible) other issues that I'm going to talk a little bit about, too.

So this is not a crusade, this is really an attempt to shed some hard evidence on the issue of social health insurance versus tax money.

Okay, so a little bit of background. Ninety percent of the OECD countries actually finance the majority of the health expenditures, publicly. There are two exceptions: The United States and Mexico, and Mexico will probably get there pretty soon, so the

United States will be the only country in the OECD that doesn't finance a majority of its health-spending publicly. But even that is not far behind (inaudible).

But if we divide the 28 countries that do finance the health care publicly, the half-use revenue is exactly 14, and the other half have central health insurance systems using dedicated earnings related contributions for the (inaudible), and they have a mixture of methods for the people who are not formal sector workers, and your income-related contributions for the self-employed and tax revenues for other people or a mixture of (inaudible).

In the non-OECD countries, it's actually only six percent in the majority,(inaudible) financed publicly and not surprisingly only 20 percent have social health insurance. And most countries are almost exclusively (inaudible) located in Latin America and East Asia. Africa is the region where social health insurance is potentially starting to pick up and Chris

Atim here has worked on Ghana and Uganda and social health insurance system. Chris is not here but in France and he postponed his departure from Washington so he could be here. So I think he'll be a very valuable person for the discussion after this session.

And those who follow the news, Charlie your communist point might be telling you something about what's happening in the social health insurance (inaudible). You might find it that the old social health insurance countries, France and Germany, for example, are actually reducing their reliance on payroll contributions. In Latin America, big concerns over the labor market impacts social health insurance. A lot of developing countries are struggling to achieve universal coverage despite very clear policy goals, if that's what you want to do, and the fact that the OECD is fair, and the Senate took that case for universal coverage to be achieved.

The developing world is doing it faster, but,

arguably, not fast enough given the impatience of the developing world policymakers who want to get there more quickly than decades, that's for sure. And we've also got some poor countries looking at social health insurance, and some trying it out from an example.

Okay, so why focus on Europe and Central Asia? Well, it's a nice (inaudible) sort of laboratory, almost a laboratory experiment when we've got staggered and incomplete adoption of social health insurance, but after the "ECA" countries adopted social health insurance during the 1990s, a couple in the late 1980s, and did so in a staggered way -- they didn't all do it in one go, so the study design is very similar to the studies that you see in the United States where people look at differential adoption of public policies. In health little (inaudible) areas such as divorce laws and so on. And these studies exploit this staggered and in some cases incomplete roll-outs in order to get at the aggregate's and interstates' -- my

case, actual [effects], but in that case states' effects of the policy in question.

I think it's worth emphasizing the fact that we are looking at the big picture here, the aggregate picture. So we're taking into account any repercussions that have trickled through the health system. So when I look, for example, at health outcomes, I could be picking up the facts that stem from hospitals working back to that, or the non-hospital sector actually doing more as a result of the social health insurance reforms.

So, if I, for example, were just focusing on hospitals, I would be missing. So I'm looking right at the big aggregate picture, and, you know, (inaudible) to health spending or costs. If I was to look just to hospitals and (inaudible) the adjustments to transitions to social health insurance, was that less business was done in hospitals, and hospitals are starting to pick up more serious cases. And, that

might be giving very much being pictures, and it might reflect the reforms for driving costs up, or as, in fact, what was happening with the care that was being delivered by a bigger number of players, and the total cost might have been going down, but to look at one of the justifications for looking at the big picture

One of the questions we're trying to get up here, well, the first one is, does social health insurance adoption lead to higher health standing? Some people argue that people may be more willing to contribute to a social health insurance scheme than pay taxes because the revenues that are earmarked for heath, and there's some clearly tangible gains for the contributor. And that's not necessarily the case with taxes.

On the other hand, evasion or underreporting in social health insurance seems to be very commonplace. At least, I think it's a probably the classic study of this in cases along the (inaudible),

but from very, very large levels of evasion and underreporting. And something that we see in the ECA region is that the Ministry of Finance or these local governments are reducing their contributions to government health spending, and social health insurance grows on the grounds that the social health insurance schemes opposed to the financing health checks that we don't need tax revenues anymore. And they're doing so in line with theoretical revenue, not actual revenues.

So theoretical revenues have fallen short of actual revenues that (inaudible) evasion, underreporting, then the social health insurance scheme could be in some big trouble from the revenue side.

The second question is, are social health insurance schemes better at translating money into health-out compensation. And this is often the case that (inaudible) the social health insurance schemes. They permit this separation between purchasing and provision, and that should make for a more efficient

health system. On the down side, what we see is some corruption and captured by provider interests in social health insurance agencies. Contracts are not always competitive. They're often overly generous and they're often captured by providers, and in any case what we need to take into account is that there's actually quite a lot of administrative costs associated with this.

That area on the left side is the possibility of negative effects on labor markets. In Western Europe and Germany in particular, this has been a big issue where there's been a perception that part of the rise in unemployment in Germany has been due to the German fascination with the social insurance system, and whereas contributions from health and other benefits amount to a very large (inaudible) of the over-wage bill, and that's considered to be calming German industry in terms of its international competitiveness and reducing the amount of labor in

Germany and increasing unemployment.

I have to say the evidence on this is very limited. In fact the only English-language Germans that I could find was on payroll taxes, which is an applied economics, didn't find any impact to the payroll taxes on employments in Germany at all. But, clearly, the view of German politicians is that this is an (inaudible). In fact, the now cost, [Predist Jones] , Minister of Health, came to Washington and described this linking of finance to earnings as the Achilles heel in the German system.

(inaudible) of that interesting statement, because that is the hallmark of the social health insurance system and one of the big contributions of Germany to health financing. So that is something of a whole process, I think, for the Germans to come to that conclusion.

We can do a quick tour of social health insurance documenting me at the region. (inaudible)

1945 to 1990 most of the countries -- the former Yugoslavia is the exception, I think-- financed health care through general revenues and had this very century plans to match their model. In the early 1990s, as the Berlin Wall came down and countries were looking to move away from the communist system, they started looking to social health insurance to help solve some public big problems.

One was government revenues which were shared in defeat declined sharply, and in a lot of these countries -- Russia, for example, was the big one -- GDP itself declined. So the health sector was in a big mess from the point of view of government revenues on health. And it was thought that social health insurance would alter the possibility of additional, little (inaudible) more stable revenues. And it was fairly clear, if you talked to doctors working in these countries, that the big carrot for them was that it was an opportunity to get their salaries back up to a level

that was what they had before the collapse of government revenue.

My very first mission for the World Bank, actually, was in Belarus, and they were pushing very hard for a social health insurance. Our only (inaudible) one of the countries that didn't get it, and the doctor were absolutely explicit. They said, you know, "We used to get paid well. We're not getting paid now. This is an opportunity for us to have our pot of money and make sure that salaries recover in the health sector."

From the point of view of delivering health care, the idea was really that the new social health insurance agency that was created would sit at arms' length from the Ministry of Health and the Ministry of Finance. It would develop purchasing capacity, it would promote competition within the public sector, and also between the public and private sectors. And all of this would translate into better health services

and, presumably, better health outcomes, too. So this was the sort of thinking.

So this gives you a quick view of who adopted social health insurance when, but also the delays on that, the share of spending that's financed through social health insurance. So white means the country is still stuck with a tax finance system. Anything else means that it's got a social health insurance system of, in the sense that has some social health insurance revenues in focal health spending. "M" means we don't have days from the exact amounts, and the light-gray means the social health insurance shares between zero and 50 percent. The dark is greater than 50 percent.

So what you see here is that the European countries switched to social health insurance early on, and did so with a vengeance. They quickly got up to more than 50 percent, very often 60, 70, 80 percent of revenues coming from social health insurance contributions. Some, like Lithuania, got their

(inaudible) in steps, and the -- and Bulgaria, too. I'm really talking about the sort of more central European countries, when I (inaudible) pretty much the first comment.

The Asian countries, where they switched, and Russia, too, haven't sort of adopted social health insurance as such advantage. They've got some places still on up to 50 percent. But they do have a social health insurance scheme in place in the sense that that that's the policy and the policy is to grow it. And there are separate social health insurance agencies, and that is the model for health financing. It's just taking a little longer in some of these places.

One point worth noting is that some of these countries have deviated somewhat from the traditional Bismarckian model in that they have a social health insurance agency, but they're not relying on payroll-based contributions. And so, for example, Poland has a social health insurance agency, but it's all income-

related, so the tax base is broad, and it's the same base being applied by the urban employee or self-employed.

Latvia went one step further and said, Let's not just confine our revenue resources to income tax, but let's use the full scope of general revenues, but let's have a social health insurance agency as well. Now, there are big differences, I gather, between what Latvia looks like on paper, which I think is pretty neat, to what it's actually looking like in reality which is about -- I'm fickle -- but it's worth bearing in mind that you can separate the idea of cutting general revenues (inaudible) payroll contributions and the idea of having a social health insurance agency, and we (inaudible). The fact that Latvia hasn't quite got its act together yet doesn't necessarily mean that it's an impossible model to work towards.

If you look at the detail of the delivery side, the helpings are actually played out, it's rather

different from the ideal that I sketched out in the previous slide. And you still get big transfers, (inaudible) transfers from Ministry of Health to providers. Some social health insurance agencies actually haven't got contracts in place, and earning now are starting to do so. Where they do exist, they're typically not competitive and very often not contracting with the private sector. If they are, they're doing so in ambulatory care. So the big vision hasn't actually come to pass yet.

And that's something worth bearing in mind when we look at the other (inaudible). What has tended to happen, however, is social health insurance has tended to lead to a switch from budgets to a system that involves budgets plus other things -- frequent service or patient-based payments at which the RGs I guess is the big example, but there are others.

This gives you a more concrete sense of the shift away from the old way of paying providers to news

ways of paying providers. So the light gray is budgets; the middle gray is provider-based payments which we include the RGs. Hungary, for example, adopted the RGs early on and stuck with it in spite of some teaming problems and also some fundamental issues, I think, there, too.

Fee-for-services, the black, you could see that very often there was a shift to fee-for-service which hasn't always stuck. So, for example, the Slovak Republic switched to fee-for-service but then actually realized that wasn't such a great idea and moved to some form of provider-based paying mechanism.

If you look at these two together, which the left-hand chart being the rollout of social health insurance, the adoption of social health insurance, the right hand being the provider payment reforms, you can see that, typically, there's a lag, not always, but typically there's a lag from the adoption of social health insurance to the changes in the way they

provided the pay. So, interestingly and importantly on (inaudible) work is that some non-adopters, we'll say, started shifting.

The black there, for example, which is not classified as social health insurance in Poland, also started moving to three to fee-for-service or some other special thing methods. And this slight lag in non-alignments of the shifts of the financing source and the provider payment mechanism actually will allow us to identify separately the impact of social health insurance from the provider payment reforms. One of the points I want to make is that the results might present you right at the end are not a confusion of the two; they are pure associative of chance results.

Okay, so a little bit of "econometrics". We've got (inaudible) data here, 28 countries, and we've got time running from 1990 to 2004. The basic model one might estimate would look something like this were we regress the outcome in Count I at Time T on a vector of

variables we might think would influence the outcome, and also whether the country has social health insurance in place at that time. And what we want to know is the estimate of delta, which is the impact of social health insurance on the outcome of interests. So the "econometric" programs we need to think about since we don't look at misleading results.

Firstly, in studies like this, including the studies I mentioned earlier of U.S. studies that have looked at the differential role out of policies and laws across the 50 states using pretty much a similar method to what we're using, they've often ignored the fact that the error terms subject to (inaudible) correlation, and that give you very misleading results. Right now, (inaudible) I ask to do flow and somebody else in the (inaudible), I can always, whether they do the most embarrassing thing they can possibly do amongst your colleagues, which is pull together all the studies using in a particular genre where they've made

extravagant claims for the impact of different laws and policy, and show that by properly re-running the model, allowing for the correlation, a lot of the results then look quite strong after all.

Basically, the problem is that these statistics tend to be much too large and don't take into account correlation. When they did that on their work, they found that -- the result study disappearing, and so it's very important to correct both correlation and also (inaudible) which we do.

The second problem, which probably jumps out at you more quickly is that social health insurance is likely to be endogenous. For example, you would imagine there are some unobservables that are correlated with the outcome, in particular labor market outcomes that would also be correlated with the adoption of social health insurance. For example, the informal economy would be one factor that would pause -- would make governments pause in thinking about

whether to adopt social health insurance or not. And if we're not picking up all of the relevant determinants of informality, which will be one of our outcome variables, we could end up having a problem. In fact, what we find is that the indoctrinating problem is largest in the case of the labor market outcome, and less (inaudible) in the case of the health outcome (inaudible), not altogether surprising given social health insurance is probably (inaudible) linked to the labor market.

We've got a couple of methods to get round us, potentially in Doctrine 80. One is we can switch from the model we had a moment ago to a model that allows for a nonspecific unobservable common to all countries. So during this period, there were very often region-wide shops where economies started collapsing simultaneously, sometime due to financial contagion and so on.

We can allow for region-wide (inaudible) wide

shocks by having a time-specific, unobservable. But we can also (inaudible) the country-specific unobservables. And we could do so in a way that doesn't just require that that country-specific unobservable would be a constant, which is what you have in a standard fixed-effect model. But we can allow that unobservable to grow full with time in a linear fashion, actually, a more flexible model than standard fixed-effect model.

The second way we can try to overcome (inaudible)is using instrumental variables, and in both of these cases we've done test to assess the validity of our results. So thinking about the first approach, which is introducing these unobservables, basically what we have now is a good point to start going -- (inaudible). This figure T is this region-wide time-specific unobservable, and then we've got a couple of unobservables here out riding the country-specific constant term, and then this linear trans-term here.

So this is a more general form of the equation I had up a moment ago. Taking price difference of that gives you this equation here, so we've got in the price differences a time-specific unobservable, and also a country-specific unobservable in the price differences.

Now, if you had standard fixed (inaudible) and you were doing the price differences, alpha just drops out, so you don't have any country-specific unobservable in the price difference model. We have that here.

This is actually--those of you who know the literature--this is a generalization of the difference in difference estimator. The difference in difference estimator doesn't have these annual Z's in it, and it doesn't have this individual country-specific intercept in it either. So this is a general form of a very common difference in difference estimator. And we can estimate this either by running a fixed-effect model, the GI being the fixed effects, or we can difference

again.

In the U.S. we have triple differences. We think that our estimates are pretty much okay for the health sector. There's a nice test. I think I introduced it. Sometimes we exploited this with this method on the role of Medicare. In fact, in the U.S., where what they did was to include a lead policy dummy, so (inaudible) will the policy be adopted next year? And if that lead dummy has a significant coefficient, it's suggesting that there is reverse causality. But it's actually not the policy that's driving the outcome but rather the outcomes, over time, that are driving the policy.

We don't find significant coefficients on that lead dummy which was in our health model, in very, very few of our health models. In our labor models, by contrast, we do find suspected reverse causality coming in, and that's telling us that even with this very general model, this generalized version of the

difference in difference estimator, we're not really capturing the endogenous problem completely, which leads us in the labor market analysis to look at the use of IV external variables.

We've got tunnel data so we can use black values of social health insurances as some of our instruments, and we just use one black period, and the assumption, then, is that our era today is not correlated with social health insurance last year or the year before that. And we've also got the possibility of using traditional instruments, and the one we use there is whether the country had social health insurance prior to communism (inaudible). We do the full battery of tasks testing whether the instruments are relevant, whether they're weak or strong instruments, and whether they're valid in the sense that models are over identified, and we find that these instruments then prove to be okay.

I'm using a little loose language here, but

let me get to the results. And we've got some estimation by two (inaudible) squared and also generalized methods and (inaudible) speaking, multiple precision smaller standard errors.

Okay, so on to the data. One fun thing about working in ECA is that, out of all the regions in the World Bank, it is probably the region that is most rich in data. It's quite shocking how much data is available in ECA on a comfortable basis that is simply not true of any other region other than the OECD, where you could do something like this. But, of course, the transitions in the OECD happened long ago, countries like Denmark switched to tax finance. But they did so in the '70s, or early '80s, whatever it was, and the OECD made the transfer back that far. So we've got a ton of data here from the Copenhagen office which produces all these nice world health role statistics.

UNICEF in Florence has this trans (inaudible) database, and that's UNICEF office covering pretty much

the same region. And, of course, the World Bank also has a little bit of faith in the world development indicators. So if we're thinking about health sector outcomes, we can get data on health spending and health spending per capita. We can also get some data -- and this is where we'd like to get more data -- on salaries as a percentage of spending, and you're back to my experience to Belarus. You have one of the hypotheses being that the gentleman that talked to me in Belarus was really on to something that's actuating the part of the social health insurance story is raising doctors' salaries.

Physician numbers, and then we've got length of stay, bed occupancy, right number of beds and patients, I've mentioned, and so on. Hospital discharges, and we've got all of that by diagnosis. Immunization coverage by type of immunization. A lot of data on mortality, life expectancy under five, and mortality -- maternal mortality. And then standardized

death rates by cause as well, and then we've got some information on avoidable deaths, deaths from appendicitis and surgery infection, some people argue at some measure of quality at the hospital level, and these are clearly avoidable deaths. Surgery infection is obvious, and deaths where you could really say that's a scenario where health spending ought to be able to make a difference. And disease incidents, and again by diagnosis, and all of this data.

Now, we've got here 69 health outcome variables, and here if you take into account we've got diagnosis for all of these things. And 28 countries, 16 years, that means out data set could be maximally 30,912 observations, but we've got 23,608. So that's a pretty cool data set, actually, and a lot of numbers to play with.

And later market outcomes, we've got some good information here, but this is the last complete data set. We've got only 55 percent nons in this data

set. We want to look at the possible impacts of social health insurance on the wage rate, and we've put together data from WDI and the UNICEF trans (inaudible) space to get annual wages and salaries, and constant (inaudible), and for the employee population from that age group (inaudible).

Unemployment from the ILO database, they've got a lot of data for this region, too. Unemployment, registered unemployment, long-term unemployed, so one of the points to bear in mind here is that the unemployment rate comes from labor force (inaudible) dates whereas registered unemployment comes from government's employment offices. So one of the questions we'll come to in a moment is whether social health insurance might change the incentives for people to register as unemployed even if the amount number of unemployed doesn't change or vice versa.

Employment and we've got sources there. Now, one of the big issues in Latin America, as I mentioned

is -- and to some degree in Germany, too -- whether social health insurance encourages informality. And so the argument in Latin America is that, particularly in the context of pension, the people don't really live long enough to make contributing to a pension scheme economics. So at least from the point of view of pensions, they would rather not contribute. And insofar as health benefits are bundled together with pension benefits, that social way of financing health care may encourage people to off (inaudible) of the formal sector (inaudible) the informal sector.

And, of course, getting at the size of the informal economy is a bit of a problem, and there have been lots of different approaches to this. We've taken a couple of measures here that are not really 100 percent satisfactory, but as you troll through this informality (inaudible), you realize that there is no gold standard on the measurements of informality. So the first one we've got is a measure of the extent of

the informal economy based on the discrepancy between GDP growth and electricity demand.

Now, the reason I'm not altogether convinced by this is it's become something of a gold standard in the (inaudible). And the idea really is that if these two are growing at very different rates, then there's probably something that's not being picked up in GDP that is being picked up in the demand for electricity. But as people go informal, you know, it's not obvious that demand for electricity should increase hugely unless they forget to turn out their lights in the World Bank office when they go and just work at home or something. But, presumably, their going informal means that it was (inaudible) in that, and their office actually gets occupied by someone else. But, too, they may start using a little bit more electricity at home.

So the big growth to GDP and the big -- rather smaller growth in the electricity demand should be telling you something when you adjust to certain

things. So that some of my colleagues in the World Bank have used it as a measure of informality, and we used -- I'm not a (inaudible).

Informal employment is another one, but what is informal employment? Well, self-employment's one, but that's good data on self-employment, and agriculture employment's another possibility, and we can quibble about the ability to (inaudible).

Lay-the-course participation is something else that we want to look at as well. Okay, what about our need variables? Well, we've got TDP per capital, that's one of the obvious ones. The public shares some spending, so we cannot (inaudible) include that. That means that we're going to be basically not allowing for the possibility that part of the channel by which social health insurance affects the outcome is by changing the public share.

Really, what I'm wanting to look at here is the impact of social health insurance on the outcomes,

holding constant the government share health spending, or government share of spending includes social health insurance. So what we don't want to do is to confound the two effects under which would be financing mode and the other would be the social health insurance comes along, the amount of government spending goes up. The only control of government spending is to release a share of spending publicly.

In the health models, we've got the faction populations of salability, and it's important if we're thinking about mortality, for example, in the urban population. And in the labor model we're controlling for total health spending, and so what we're looking for there is holding constant total health spending as social health insurance affects, for example, unemployment.

And then, also, the hospital payment masters, I had that chart up earlier showing you the transitions from budget to people service or patient-based train of

methods in some of the countries. And in some of the results presents an offset of results on health, I'm going to be including hospital payments methods. So we can really try to separate our effect of this financing source, and the organization of financing from the way hospitals pay.

We also looked at the way doctors were paid on ambulatory care, but the data is very much less complete. And these data all come from the health in transition series, which is another great innovation of the Copenhagen office of WHO. I'm just afraid these guys don't have time to sleep, they produce so much information. And we went through one by one all of these "hits," as they're called, and the Chair very often (inaudible) so long digging out the information about payment mechanisms and when they change. And when they're changed to something else if they change again.

Okay, so finally, some results. The first set of results show the impact of social health

insurance on different aspects of health expenditures, and I put the results in percentage format, so this is basically how, for example, total health expenditure goes up percentage-wise as a result to adopting social health insurance. And this is the probe value, and so anything that's plain bold is significant at the five percent level. At that time anything that's italicized bold is significant at the 10 percent level but not at the five percent level.

The final column gets you the number of transitions, so it tells us how many transitions were identifying the coefficient (inaudible). So where we've got a lot of missing data, which is the case, for example, in salaries, we're identifying, estimating that parameter off of just three transitions. And, obviously, the more transitions you've got, the more conflicts we can have in the results. These three countries that provide the information to get us this summary impact, and it could be just very special

countries. And we've noticed that generalizing. And were we've got 13 and Latin 14 countries, you know, that gives us a little bit more confidence.

So what we're finding here is fairly clear evidence that government health spending, at least, is positively impacted by social health insurance. Looking on the insurance list gives very small percentages, and some evidence. I'm cautious about this, some particular items on this (inaudible) transition, some evidence that the Belarusian doctors were on to something. But, indeed, part of the increase in health spending may have been due to doctors' salaries going up. This is share (inaudible) hypothesis.

And what were hospitals doing as the results of transition in social health insurance? Well, some evidence here that length of stay was reduced as a result of moving to social health insurance. Beds we used more intensively, increasing the bed occupancy

rates, and inpatient admissions under the acute care admissions, and both positively impacted the transition to social health insurance. And we're identifying there are quite a large number of transitions.

Not much going on in terms of the cause-specific discharges and, actually, reductions in certain infection rates, but again identified (inaudible) three transitions that are (inaudible) and so they're (inaudible).

Mr. GRIFFIN: Are they the same three that the increased --

MR. WAGSTAFF: I'm not sure.

Mr. GRIFFIN: -- (inaudible) -- their attention to detail.

MR. WAGSTAFF: I'll get back to you on that one.

Okay, what about health outcomes? So we've seen social health insurance pushing out health spending, more patients being seen in hospital and

probably because of the increase, that occupancy rate showed a length of stay. And it would be kind of nice if we could see some impacts on health outcomes such as really what we're after at the end of the day. Well, I can use that as there isn't much to write home about. We see just a couple of coefficients sort of significant, and they're opposite directions.

So I think the message we could take away from this is that as far as life expectancy and mortality are concerned, we are not seeing impacts.

SPEAKER: The question developed of this data, given that we have so much other data to show that health status and health outcomes are much more determined by surgical economics, certain chemicals of value of medical care.

MR. WAGSTAFF: Yes.

SPEAKER: Is this -- in what way is this meaningful in how you put this, factored out? Do you (inaudible)? Do you (inaudible) socioeconomics?

MR. WAGSTAFF: Yes. Remember that the factor we use includes GDP's account. It's just possible that these trends in pathology includes a big drive. And I remember too, I didn't finding any results of office changes (inaudible). It's in the levels analysis that we tend to find it hard to disentangle the effects of, health spending from this effect of these other things.

And the difference in analysis, it should be easier, particularly, as we've got these unobservables to take into account. Remember, we've got the very specific unobservable; we've got a country-specific unobservable, and a time trend, unobservable time trend.

SPEAKER: So these are very general specifications that should be sweeping out, and not only the changes in set which includes GDP (inaudible) but any unobservables that you are -- specifics of here in an old country what specifics are contrary and across those -- and so that should include factors like

the size of an underclass that might be especially unhealthy, (inaudible).

MR. WAGSTAFF: And we're not here able to pick up here any sort of distributional stuff. And so, I'm going to show you a little bit at the end something about the qualities within social health insurance. I'm really picking up here just the aggregate effects. One way we could try to include what you're suggesting is some measure of the distribution, for example, to include the (inaudible) or probably a head count or something like that, and include that as one of the effects, and it's not just GDP, the capital, but the quality of the United States.

MR. GRIFFIN: Do you have any -- I know this is controversial, but given that data (off mike.)

MR. WAGSTAFF: Yes. I'd be very happy to include (inaudible).

MR. GRIFFIN: This will be a topic that I'm sure will come back to you.

MR. WAGSTAFF: Now, this is showing us the effects, or, more accurately, the non-effects of social health insurance on cause-specific death rates, and certainly nothing there to (inaudible).

Disease incidents, same story. Last section looks at C-sections and also immunization, and there's nothing going on here either, which is interesting because some people have written about how social health insurance systems, including in reactive countries haven't done a very good job on public health. It's a fragmented approach in terms of coverage, but also fragmentation in terms of players or actors in the system tends to make for a difficult public health scenario.

What we're finding here is that that's not borne out by the evidence at least in terms of immunization coverage.

Now, one of the concerns you might have in the last slides was that I was in knots and I'm not

sure if I made that explicit, not accounting for provider payment methods. That wasn't one of my zeds. So one question I want to ask now is, was the social health insurance impacts or lack thereof in the earlier slides due to a failure to control or concurrent to provide a payment for health. And so, as we saw earlier, that provider payment reforms weren't always concurrent; in fact, a lot of them weren't and were happened a little later. But insofar as that many of the concurrent provider's payment reforms, let's see if we can tease out the purer section of health insurance effects from the provider payment reform effect.

So the first column here gives you the results you've already seen for health-sending hospitals, and the second column gives you the social health insurance impact when we include dummy variables for fee-for-service and some form of patient-based provider method, including DRTs. The omitted category in these two dummies is these budgets, so for example,

what this is telling us is that countries that shifted to fee-for-service saw a 17 percent increase in health expenditures compared to having budgets.

Now, what you see here is that the story with respect to government expenditures is still there. It's somewhat reduced. We're going from a 15 to an 11 percent impact. The story we were telling about the impacts on admissions, and that's still there, at least in the case of a huge commission. It's almost still there in the case of in-patient to patients; it's just a little smaller in numbers, and it's not quite significant in that case.

And but (inaudible) speaking, the story we're telling out here about social health insurance driving up government expenditure and seeing more and having hospitals treat more patients is robust with respect to the inclusion of these provider payment reform variables. And these variables are of interest, I think, in their own rights, and (inaudible) look at the

impacts of provider payment reforms in this region. And then it's a brother payment to that, which we'll look at (inaudible) similar method for the OECD countries.

What about labor market outcomes? So where there is a blank on the right-hand part of the table here, it means that the outcome in question was successfully estimated as the standard brand of trend model that we used earlier. And when there's not a blank, we find evidence of (inaudible) even allowing for all of these modifications to the difference in different (inaudible). And so we used in that case instrumental variables.

So what we're seeing here is that 20 percent increase in the gross wage is a result of moving to social health insurance, and that's consistent with the sort of standard textbook analysis of payroll tax. We introduce a payroll tax gross wage will go up, and some of the adjustment will be unemployment. And the net

wage will probably go down. This is picking up the impacts on the gross wage. So this is sort of consistent with the German story where this is fair, but as a result of having social health insurance or wages, or gross wages inclusive of the social health insurance contribution are higher than (inaudible).

Unemployment and employment, well, we've got some issues to do with (inaudible) here and different definitions of employment. If we're looking, for example, at employment as a fraction of the population from the trans (inaudible) database, we're finding evidence of (inaudible). And when we take that into account using instrumental variables, what we're seeing is that 10 percent reduction in employment. That's not corroborated, at least to the same degree, by the ILO (inaudible) -- the ILO measure of employment.

When we look at registered unemployments and in unemployment, we're not seeing any effects on unemployment, but we are in the RD estimate seeing an

impact on registered unemployment. And quite big at times, and one of the things that worried me here is that we may be picking up concurrent reforms in unemployment benefits. So I dug into the literature on unemployment benefit reform in the new region, and found evidence only for the European countries. And the European countries that I was able to find evidence for didn't seem to indicate a big change in the way unemployment benefits are calculated or administered in the years when the country transitioned to social health insurance.

In fact, if you look at what's going to be replacement rates, this gives you some idea of how much people earn when they're unemployed compared to what they would be earning if they were employed. The replacement rate was actually dropping in the years

when social health insurance was introduced in our countries for which I could find data, which would actually lead you to be less likely to enroll or

register as unemployed.

So I'm not able to rationalize this, mysteriously, and I would admit implausibly high impacts on registered unemployment (inaudible) to grapple with an unemployment. We grappled with it and sorted it out.

Then we've got some measures here of the informant economy and employment and (inaudible). This is the electricity-based measure. Nothing going on here at all.

I think one possible story here is that these could be just bad measures, but if you believe there's something to these measures, it may be something to do with the fact that this is not a series of countries that looks like the Latin America countries where you have one system for the foremost sector markets and another for the informal sector markets. These countries were adamant when they switched to social health insurance with policy of universal coverage

that, as being just the hallmark of the old communist system, should be maintained. So the degree to which the non-coverage or undercoverage amongst the informal sector seems to be much less.

Now, it's hard to get (inaudible) good data on this, and this is something I'm working on a little bit. There certainly seems to be issues to deal with the enrollment, gypsy populations, but when you talk to people at work -- and Charlie could maybe shed some light on this -- and what they tell you is that when you go to hospital, you don't have to show a card that says, "I'm a contributor," before you start getting treated. It's the same facilities for everybody. And the presumption is that you're eligible for treatment.

And even when it comes to differential co-payments, it's not really clear that that's enforced very tightly. So I think it's probably the case that we would expect a bigger impact if we were looking at Latin America than if we were looking at the

European/Central Asian countries, because the concern has been to keep everybody in.

One issue to do with day (inaudible) is that if you look at household survey dates on the coverage, and it's not really clear what that means. I have spoken to someone from Bosnia and Herzegovina, and he was explaining to me, oh, you shouldn't believe those survey data because what happens is employers don't register people until they get sick. And then when they get sick, they register them. So that you shouldn't be sort of saying always I only got 89.9 percent coverage, basically what we have at the 100 percent coverage.

This is something to the (inaudible). So if we're looking at the conditions in this particular study, with respect to the health sector outcomes, what we're seeing, I think, is a clear evidence of increases in government spending as a result of transition to social health insurance, and much smaller increases in

percent increases in hospital admissions, and no evidence or mortality or disease incidence despite this 10 to 15 percent increase in health spending, and that these are pure social health insurance effects, not due to contemporaneous provider payment reforms.

The later market estimates, I think are consistently higher wages in the economy as a whole and lower employment, but nothing to write home about with respect to impacts on the (inaudible) economy. And so if I could just sort of stand back in the last three minutes from this particular study and try and set this in a broader context on some of the other concerns about social health insurance, because, as I say, I'm not on a crusade, but I think it's important to put all of these cards on the table so as to get at a clear sense of what's going on.

If we were to think about how social insurance systems fare with respect to fairness in revenue raising, and we were assessing fairness in

times of progressivity, but it's very clear that tax-financed health systems do a better job. The bigger the share of government finance coming from social health insurance, on average the smaller is the progressivity in that of government finance. So this is government-financed from both social health insurance and taxation, and on this axis I've plotted the share of government finance coming from social health insurance.

And what I've done here is to overlay the results from two studies, two cross-country comparative studies. The EU study, the equity study that's called that I was involved in. And a study called the equi-tax study that did a similar thing in the Asia regions of the World Bank, the South Asia and East Asia regions. And what I've done here is to just overlay for the latter study the results from the high-income economy. So Hong Kong, Japan, Korea, and Taiwan, those last three being good examples of social health insurance

countries in the industrialized world as a whole, and Hong Kong, of course, being a varies to British type national health service system and (inaudible) an economy that has a very progressive tax system.

So what you can see is that if you raise the share of spending finance for social health insurance, the less fair the (inaudible) system becomes. Now --

MR. GRIFFIN: Sorry, the zero is just a proportional --

MR. WAGSTAFF: It's proportional, sorry, yes. So probably it means progressive, negative means regressive.

MR. GRIFFIN: "She" is payroll tax.

MR. WAGSTAFF: "She" is --

MR. GRIFFIN: (inaudible) -- is payroll taxes. Payroll taxes of percentage of government (inaudible).

MR. WAGSTAFF: Yes. Yes, that's right.

MR. GRIFFIN: So the higher the percentage of payroll tax, the more regressive?

MR. WAGSTAFF: Yes.

MR. GRIFFIN: It makes sense.

MR. WAGSTAFF: Yes.

MR. GRIFFIN: The more regressive, the overall taxes (inaudible).

MR. WAGSTAFF: The more regressive health financing is.

MR. GRIFFIN: So just about --

MR. WAGSTAFF: Yes.

MR. GRIFFIN: -- this is health (inaudible).

MR. WAGSTAFF: Yes. So this is this is part in the consequence of the narrowed base and also part of the consequences of the ceiling, the contribution ceiling, now, offset to some degree by the, you know, the exemption for certain groups.

MR. GRIFFIN: This is suggesting to label

this as raising the health revenues.

MR. WAGSTAFF: Yes.

MR. GRIFFIN: And given that the tax structure and income level of beyond just have a huge impact, would the Institute view this again as being low-income levels, where maybe the (inaudible) taxation and not the instruments have a different equity impact. Because you're talking about here very high income levels.

MR. WAGSTAFF: Yes.

MR. GRIFFIN: And high labor markets and whatever, and that's not necessarily transferrable to all income taxes.

MR. WAGSTAFF: That's right. I've done a little bit of this, and it's not unless there are some results for the poorer economies in the Asia countries, which I haven't put up here. The tax system is often more progressive in the lower-income segments that I've discovered. Because if you think, for example, about

taxes, indirect taxes, a lot of very poor people are growing their own food, and they're not buying their food. The people who are paying BAT on food purchases are the better off, they're not growing (inaudible) food.

So what you see with respect to indirect taxes is much more likely to make their marriages progressive or proportional, whereas in the OECD countries, indirect taxes tend to be legal, and that to some degree, is offset by banding where you have luxury goods charged at a higher rate. For example, one thing we found in this OECD study was as Portugal was required to shift to single-rate of BAT, when it jointed the EU, or rather when the EU imposed this (inaudible), indirect taxes in Portugal. Portugal went from being relatively progressive to being regressive, and this was because prior codes were now taxed at the same rate, so there's some gasoline and everything else.

Now, in the developing world you also see that differential binding, but you also see the fact that a lot of people, as I said, are growing stuff and not paying taxes on and some (inaudible).

The other point to make in that context is that if the progressivity or regressiveness of the social health insurance system, it depends on how many people are in this. This is looking across the entire income distribution, so if you only have got a few very rich people who are actually contributing to it, you might have a social health insurance system that looked progressive. It's progressive across the entire distribution of income even if it's regressive with respect to the people that are in it, so you can set a sequence, but you have to be clear (inaudible) what you're talking about.

Now, the other concern equity-wise with social health insurance is that the tying of contributions to entitlements makes for quite large

gaps in coverage, and these gaps in coverage tend to be bigger for those down at the bottom of the income distribution. So three countries here -- Latin America, Argentina, Chile, and Colombia -- where even despite big improvements in Columbia, you still have a lot of the (inaudible) mentality to both have coverage or coverage through the group with subsidized regime or (inaudible) coverage through the contributor regime. And this is coverage through the (inaudible) in Chile-- the private insurers or other private insurers, other insurance schemes (inaudible). They tend to be less important.

In Argentina, this seems to be (inaudible) and the private insurers and some people have both. And Vietnam, a few things for a completely different region of the world, this is a country that introduced social health insurance back in 1993, 11 years after their struggling to get coverage. It's still at a very low rate, and it's now filling in the bottom by having

a scheme that's targeted to the core.

And perhaps what will happen soon -- I've now got the 2006 data for Vietnam, it will be interesting to see. In Vietnam what we'll find is a U-shape distribution where government is being trying very hard to bring in the core in public rates up to a reasonable level there, and probably some increase amongst the rich, too. But it's finding very hard to get the middle-income groups to enroll on the voluntary basis, and that's sort of what's going on here.

So seeing that it's compulsory for the formal sector Americas is tax financed for the poor, and voluntary for everybody else. (inaudible)

Now, this is a little misleading, really, because it's not really non-coverage but rather differential coverage so, for example, if I were to show this to someone who works in Ministry of Health in Chile, they'd get very upset, and say, Oh, you're messing up here, it's the (inaudible) the program,

which was a specific program designed to fill in the gaps here, and you're not picking it up. You're showing a whole bunch of people who don't have coverage and somebody who did have coverage.

The Ministry of Health in Argentina might respond the same way, and Vietnam and Colombia, it's just that in Chile, they have one (inaudible) program and it's called something different, but the Ministry of Health in these other countries also have a program. So the issue isn't really non-coverage but differential coverage.

Now, having said that, what we do see is, at least on paper, is those in a social health insurance scheme have more generous coverage than those who are not in a social health insurance scheme, and the question then is, well, what's the implication of that for accuracy?

If we look at impacts of insurance on utilization, what's very clear is that insurance

typically impacts positively on equalization, so you give people social health insurance coverage, they'll be more likely to go and seek providers, and probably they end up being pushed further up the system, as well as something that's very clear in the case of China, for example, where social health insurance doesn't just increase the likelihood of people using the services; it increases the likelihood that they get pushed up to a high level of provider rather than get stuck down at the low level of provider.

If we look at the evidence on whether insurance reduces the risk of catastrophic out-of-pocket payments, there's some variation here in countries, including Colombia, (inaudible). And my work in Vietnam shows, yes, insurance does reduce, the rates go up, catastrophic out-of-pocket payments. Sometimes not by very much, but it does reduce it somewhat. But it's not true of China. Both in the urban and rural scheme, our estimates suggest that

actually having insurance that either leaves the risk unchanged or increases the risk.

My colleague in the Bank who have worked from Chile are convinced that (inaudible) have insurance within a (inaudible) you are actually more likely to be impoverished after a health shock and run into having assurance with this one asset, and the story in both countries is, I think that as people get sucked into the system having insurance, that insurance coverage is signaling something about their ability to pay, or somebody else's ability to pay on their behalf. And the providers are responding accordingly.

In the case of the Philippines what has been seen by (inaudible) and (inaudible) Ceylon is that as people get into private providers with insurance coverage there, providers simply change their prices. They are free to set their own pricing, absurdly, but it's true, and all that happens is that the providers manage to get greater profits at the expense of the

insurer, and patients carry on saying the same amount of out-of-pocket as before.

In China, I think it's that providers are responding, which is their price regulated by delivering fancier care, and that involves out-of-pocket payments. So patients are getting pushed up the system, so it's not just fancier care in out-patient department, it's getting shifted up to the hospital care, where you get a whole lot fancier care, and, unsurprisingly, there's a big ratcheting up on the out-of-pocket payment.

Conclusions: I think there are some questions here where the jury's still out, I think. In terms of equity, we can say fairly clearly social health insurance is (inaudible) care, it's tax financed. Where the social health insurance produces bigger revenues, more predictable revenues, it's not fair. There do seem to be some issues to do with the labor market, which the Germans do seem to be onto

something there.

In terms of coverage, there do seem to be gaps, at least in some countries and regions. I think it's less of an issue in the countries I was talking about earlier. It's not really non-coverage, but differential coverage. In terms of delivery, the key point I think to remember here is to think back to the case of Latvia and Poland. You don't want to (inaudible) the U.K. You can separate purchasing and provision under a tax financed or a social health insurance system. You can have a social health insurance agency, if you want to call it that, in Latvia using general revenues. You can have purchasing provisions separated in the U.K. sticking with general financing.

Social health insurance seems to entail higher costs. It's not really clear which costs are going up. There's some suggestive evidence there is probably salary. Do the expenditures trans -- extra

expenditures translate into better health? In (inaudible) apparently not. So this might take the conversation (inaudible).

MR. WAGSTAFF: Thank you.

(Simultaneous comments)

MS. GLASSMAN: So can you do an eight-minute commentary, and then let's have an (inaudible) discussion?

MR. GRIFFIN: Sure.

MS. GLASSMAN: Eight to ten minutes.

MR. GRIFFIN: So I'd just like to focus on a couple of things, and they may not be exactly what Adam would get from a academic audience, but I think we're more interested in policy implications of things. So that's kind of my focus.

My first observation is to say thanks to Adam for really trying to (inaudible) release some of these issues out, and to try as best as you can to bring data to bear on them, because there's so much ideology

involved in all this stuff that making an effort -- and this is a huge effort -- to try to bring numbers to bear on the question of really helpful, and raises the discussion to a completely different level.

In terms of how it's done, I would like to just mention a couple things that I think came out much more clearly when you put the two, kind of the paper on equity together with the issues of the rest of the world. And I'll just use this little table.

If I just take the introduction of the ECA paper, and you're basically saying -- you don't have to see it -- but that spending on health care, people think it should higher or what I call labor tax or an SHI setup, and lower under a general revenue or what Adam calls a tax-based setup.

Superior health look outcomes people will think it should be better under the SHI where it's under Ministry of Health, more or less. And the ability to separate financing for vision, I think the

argument is it's easier to do under this setup because of how you have this -- how you separate the revenues from -- you have the ability to separate the revenues from the provision. It's not obvious that that would be done; it's just easier, and that that is harder than the general tax because it tends to implode very quickly. It is the Ministry of Health that sets up the zone system.

But I would just like to note that in the use of these numbers, this actually becomes an independent variable rather than a dependent variable.

And then I added here unemployment, which isn't actually in the introduction but is an important part of the paper which is higher under the labor tax, as you're taxing labor lower than the general taxes because you're taxing everything.

Okay, I'd just like to emphasize how the equity cases differ from the way the rest of the world thinks about it. First of all, whenever we are

talking about regressions in terms of health outcomes, people would tend to want to limit this to those who are in the SHI system. Are health outcomes different from those people relative to health outcomes for those that are covered by the Ministry of Health? But what Adam does in the paper is, because on the assumption, really, that ECA, as soon as they move to labor tax, everybody moves to this. He's looking at the whole population, so he's looking horizontally and isn't able to discern the difference in health outcomes for the whole population once they move to SHI.

But what's clear from the second part of the presentation is that the rest of the world, this is really quite different populations who are covered by these two, and that's, I think, where lots of people have questions about the applicability of the thinking from a high-income country to the thinking of a low-income country, quite apart from the regressiveness or progressiveness of the tax revenues.

So that's a kind of an ECA-specific thing here, but I really wish we could find truth in coverage for ECA, because I actually suspect it's quite different from -- the de facto situation's quite different from the de jure. And this, a second element of that -- which may not come through here -- which is that ECA may have changed the form of financing, but they really have huge problems on the supply side. They're still stuck with all those hospitals, they're still figuring out ways to finance. And so you have this -- I guess it's a transitional situation where the government still owns the hospitals, but they've tried to separate the financing from (inaudible)

But I just wanted to mention that as an important distinction between ECA and the rest of the world as we think about it.

And then on this side, just to summarize Adam's results, he clearly finds this positive on the 15 percent. Superior health outcomes, no effect,

although I would say -- I added here -- (inaudible) -- because one way to look at it, your three -- two transition finding there is that at least they're not killing so many people after the labor tax takes over.

And then in the body of the paper spending on salaries gets added as something. So there's just that there's the overall comment here, which is the kind of the differences between ECA and the way we normally think about these issues in the developing country situations. And then, secondly, that what you start at, start on at the introduction isn't quite exactly what you conclude; so if you (inaudible), just as an editorial comment to connect the introduction to the end and what you're actually going to cover in the body in the middle, because you can't really line those up perfectly. And I would like to make it perfect.

(Laughter)

Just a few quick other comments. I haven't -- and this is -- first of all, I don't know what these

techniques, if it matters, but would population weighting affect any of this? For instances, Russia equal Lithuania in this case, and then the problem that every (inaudible) in Russia really has a somewhat different setup. The speculative -- what I would call speculation about administrative costs and so on is really speculation because it's not captured in the model, and maybe that could be removed from the conclusions and maybe put up front as a speculation instead of where it is today, which is in the conclusions.

MR. WAGSTAFF: Speculation about?

MR. GRIFFIN: That administrative costs might be higher under the SHI, which you really can't detect in the empirical work.

And then the final comment I'd like to make -- well, the second to the final comment, is that I would say the overall lesson of the ECA paper, which is completely consistent with the overall view that you

express in the SHI versus general taxation, is that you really can't detect the result in the outcome based on how health care is paid for -- I find that to be quite a sensible result, and it really isolates this as an issue of where the revenue comes from for the purpose of health care rather than how it evolved, how we got these things tied up in the world, which is the source of revenue actually implies a whole delivery system, and that sort of thing.

So it's really, you know, in a simple way a conclusion that I would expect as an economist defined, but it's very nice to have it come out so clearly that how you pay for something doesn't really affect how effective the thing is that you're paying for.

Now, there could be distributional issues and so on in the fixing, you know, depending on how separated the population is. But I think that's quite an important result.

And then my final issue is, I haven't been

reading about developing country health care or European health care, but I really lost track of what's U.S. health care. So I've invested my reading time here. And it's quite interesting how the issues here are so different from what they are everywhere else. And if you think about it apart from the coverage issue -- the U.S. health care policies tend to migrate into business schools out of public health and other economics departments. And one of the conclusions is that there's not enough competition in delivery in the U.S., which the rest of the world thinks.

I should say how I'm coming to this point. If there's not a huge difference in how you pay for health care and the outcome, then the black box in the middle is probably where we should all be focusing in some (inaudible). And I think that the policy discussion there is quite different than different parts of the world. In the U.S., it's about how to increase competition, how to change the nature of

competition to results rather than to what we do in the hospital. And how do you put, bizarrely, relative to the rest of the world, how do you put consumers in greater control over their own consumption patterns? And then how to expand coverage with that while increasing all these incentives for the market to take over? It's quite different from how (inaudible) and talks about it in the last 15 years of my life.

Okay, so those are the main points I'd like to make: No. 1, really a wonderful work; and No. 2, very important results; No. 3, it helps me focus even more on the black box.

MS. GLASSMAN: Should we just go around, and then do you want to respond, Adam?

MR. WAGSTAFF: Sure.

MS. ESCOBAR: First of all, thanks a lot for coming here and discussing with us your report -- (inaudible) -- and it is provocative, yes.

So I want to reflect a little bit on starting

from your conclusion on your last slide that you (inaudible) -- the study of income by the (inaudible), you could say, okay, social health insurance isn't (inaudible) function (inaudible) -- tax revenue.

So since you (inaudible) the paper (inaudible) social health insurance re-(inaudible), you use some of the examples in Latin America. So I'm going to use the example I know the best in Latin America, which is the one of my own country, Colombia, to put on the table certain -- some of things that he's commented on, and suggest we move to another region of the world and (inaudible) a little bit of context to these generally (inaudible) in social health insurance (inaudible) the alternative.

So in this country are the moves towards the other way around, so the general tax (inaudible) the system for most of the population when a very small cell of (inaudible) -- the population. So the effects that we were seeing there were very much applied

(inaudible) for you and social health insurance applied (inaudible).

So in terms of progressivity (inaudible), so I wonder if it is only from where the money comes from or any other arrangements that come together in the social health insurance proposal that could make the financing more progressive or less progressive. General tax system (inaudible) -- not only inefficient or otherwise the research (inaudible).

We're seeing reduction of the expansion of social health insurance in Colombia, which is no longer (inaudible). The definition of (inaudible). What happened was that, actually, the system became financed by tax that was much more progressive than any other tax, so it created a (inaudible) income. And like progressive, we (inaudible) with the people that paid (inaudible) because of the (inaudible) funds and (inaudible) subsidy that they paid to the large banks, in families so (inaudible).

So that Colombia was not to achieve with any of the fiscal reforms that had gone into the (inaudible) use. So this was a way to introduce high equity gain and progressivity in the taxation.

In terms of the evasion and into reporting taxes (inaudible) mentioned that I guess we have done some work on that. And it is quite interesting how the social health insurance in the health sector will stable, explicitly, the program that existed for general tax revenues before.

So they (inaudible) reporting now was very explicit in terms of multiplying this health, because there was an explicit contribution that needed to be made, and there was a set of benefits that would be financed with that (inaudible). And it forced the health system before it gets started, a new system of reporting income that is now used for general taxes. And in the last three or four years (inaudible) has increased quite importantly, not only you'll pay more

taxes than in general taxation.

So in that sense, it served a purpose to more than all the other (inaudible).

In terms of the administrative costs (inaudible), something that is not really understood yet what is going on because there is no way to know what were the transactional costs in the general taxation systems and how to measure them. Because, you know, just the general budget that will pay for those health service issued that could possibly go for the poor (inaudible). So that it was (inaudible).

In terms of the government spending, sure, it, interestingly, doesn't make a study of increase on total health expenditure by governments in terms of increase. And in the case of Colombia, there is total health expenditure increase and government expenditure increase.

SPEAKER: How much (inaudible)?

MS. ESCOBAR: Oh, I'm sorry, (inaudible),

okay.

Five countries spend little, that's a good thing, it's important, so coming in most of the Latin American countries wouldn't be a bad thing to do. If it's not a convenience (inaudible). And the wage (inaudible), that's another interesting thing (inaudible). Doctors wanted social health insurance because they will make more, I don't know the studying of, the whole context, but it's quite interesting how in Colombia very much the opposite, is doctors wanted to go back to general tax (inaudible) system because they now don't make as much as before.

So all this tax, I wonder if it's more a combination of not only health systems are financed, how the delivery of care is arranged, and how different financial mechanisms accompany the mobilization of resources. So not necessarily the way resources are mobilized for health will determine all the other health groups that get is here.

In terms of financial protection, well, in there and in case of (inaudible) trends here, the answer does social health insurance (inaudible)? There is a set of benefits that become explicit, so while under general taxation there is a (inaudible) for everybody, but you really, when you look at it, it's not for everybody, it's for whomever gets first (inaudible).

And so in that sense it will really depend more of the set of benefits that are going to be explicitly covered and just how large or small is that package, and then will determine the ability to measure how much catastrophic spending for these packages will be (inaudible) or not. But if you do that, your baggage for this social finance for general taxation, if you're able to do that, then there wouldn't be much difference.

So it's not so much of where the money comes from, but all the other decisions that come with the

organization of the health system.

There are millions of things that I had in mind, but (inaudible) discuss. Charlie mentioned that one, and I yield (inaudible) -- things are going to look very differently. So all this and (inaudible) discharges when the (inaudible) et cetera. They probably are more related to how care is organized than how it is financed. So not necessarily you can (inaudible) of resources in their country is going through payroll contributions, that doesn't necessarily mean that (inaudible) in a certain way.

So I wonder if one could conclude this assertion of social health insurance is inferior or superior to another option where it is more, okay, here's an option to mobilize resources, and it will really depend where the country's coming from and what is the best instrument in a moment of time to achieve certain goals. That's all.

(inaudible)

MS. GLASSMAN: (inaudible)-- around Chris, Alex, and Russell (inaudible) will be next.

MR. ATIM: I would just like to thank Adam for a really excellent presentation. I'm very happy that (inaudible) I listened to my sister and her late husband is extremely useful for me, especially listening to experience from other parts of the world from the one that I'm used to (inaudible) in East Africa.

And especially -- I mean despite that, actually, I did see some similarities between the experience there and some of the issues that are arising already in some African countries that (inaudible) especially Uganda, but also in other countries that I talk about future on hold (inaudible) Nigeria where we talk about everything we have (inaudible) issues on. So I recognize straightaway that this is (inaudible), so I'm not (inaudible) assurance because my own experience.

But I (inaudible). You know (inaudible) you mentioned that you found an abundance of data in these countries, and also I (inaudible) looked at the sources of data within international agencies and not national institutions as such, so I wondered where these were (inaudible) and identifies them as some (inaudible) after the (inaudible) or there are some (inaudible) issues that basically was after the (inaudible) season, particularly, it takes a long time (inaudible).

So would you recommend on (inaudible) of the data, you know, each (inaudible). This is really very interesting to me.

The second one is the more general one. Some issue that you haven't, actually, I think approached in depth in your analysis, is are you aware of one of the arguments that's often made in (inaudible) is that the (inaudible) of contributions to entitlements actually is more transparent than the relationship between the citizens' contribution to health service and the,

(inaudible) and therefore (inaudible) some accountabilities and greater pressure to improve service and so on.

So, I mean this is not an issue that I saw you actually address, but it's out there, and maybe -- I don't know whether there is a, you know, instead of things done, but a sense of how this issue is laying out to those countries, whether it does (inaudible) is one that I'll leave just (inaudible).

SPEAKER: (inaudible)

MR. PREKER: Adam, congratulations, as usual, excellent work. Just a couple observations. I just walked in when you were showing a slide, and I caught a glimpse and I'm not sure if I missed it, something about that many of these countries since 1945 were relaying on taxation for (inaudible). I just wonder if you could qualify that. In Eastern European countries, actually, they stopped social health insurance sometime in the '60s and '70s. So the East

European countries, the period where you actually have general revenue finances is much shorter than if you were using a 1945 (inaudible) standard base. So I'm not sure what effect that would have on the data, but it might be significant like Hungary, Czech would probably (inaudible) the case up until the 1970s, (inaudible) insurance in the 1970s.

The second point, I'm not sure what effect it would have if you somehow in the model introduced you've written more about the fact that many of these countries have essentially abandoned these historical (inaudible) to health care, and that you've had a massive increase in use -- contributions to these in of these countries. Like Georgia, it's 90 percent, 95 percent. So in a sense, you don't have taxation to finance health services in some of these countries; you actually have gone to a system where you have not social protection whatsoever. And that kind of sets a different counter-factual to saying you have health

insurance (inaudible) where you have numerous coverage and you have good access to care.

That's true in Eastern Europe, but certainly was not true in the Asian or (inaudible) where you have no care at all today. So that affects a little bit your converse action what you're trying to compare.

Finally, in your conclusion, it's interesting how white people logging the data can come up with quite different conclusions. And I must say that it might be helpful in your conclusions if you say positive or negative, and then list the things that might be positive and the things that might be negatives. So certainly when I chanced the two slides before your conclusion slides, I took away some messages which were very different from your messages.

One is the insurance effect, especially in terms of trying to mobilize more mining, if that's a good thing; better access to care in terms of (inaudible) access to care, that's a good thing. So

there's a whole lot -- list of things that you observe to your things that would consider good things, and then you have the negative things which I'd want your list because I think all (inaudible) is well, but let's put these two side by side, it makes the conclusion look quite nice, and I think this way should (inaudible) some of the things, you know, we studied that (inaudible) quite positive.

And then final comment, Charlie, I think, you're right with the black box thing, but I think you have to be careful with the language because (inaudible) when we say how you pay, you should think of that as how you pay providers. Now, that's not what you mean, you mean how the population pays for health care. So we just have to be careful with that, because that may be misunderstood. I think the message is how you actually mobilize resources from the populations, doesn't seem to have strong correlation with some of these things, but how you had to pay providers may have

a huge effect.

And also, in terms of insurance, I really dislike this term social health insurance because of the way the Europeans use it, okay, because the Europeans used health, and social health insurance to include the greatest national health service. They think of it as anything that has social protection, yeah. The continental Europeans, like Giki said right now, ILO, that group of people, when they talk about social health insurance, they include any social protection against health shocks. And that is hugely confusion, I think, because that's not what you're trying to do in this paper.

So just a slight warning: Be careful with that because when you're presenting this to a continental European audience, we can misinterpret the results.

SPEAKER: (inaudible).

MR. IUNES: I just have a little sense that

I think it would be interesting in this discussion, so I think I missed something in the general discussion of the debate sort of social health insurance and other -- and general taxation. It's a dynamic element.

In Latin America in particular, this is quite concerning given the fact that countries are going through the demographic transition, and then you get into a payroll tax system, the health sector would have to fight with the Social Security system to the other main payroll demander, and in the long term, I don't know if we can arrange that (inaudible).

In the case of Brazil, the major experience was that Social Security will win anytime because they have a very -- they cannot stop paying the elderly, and we can always cut the sources for health. So the long-term -- I don't know what is going to happen, but the right to (inaudible) on payroll taxes, there is the issue of competitiveness and distorting against labor-intensive (inaudible) bases in many of South American

developing countries' bases.

There is also the issue of this dynamic analysis, the issue of the effect of crisis on revenue. If I'm not mistaken, in the case of Colombia, for instance, payroll taxes during their crisis draws much more sharply than general revenues. So in the moment when you need more resources, you may have less, even (inaudible).

So I think this dynamic -- and I also, because I think (inaudible).

MR. BLOCHE: Adam, thanks for a really interesting presentation. I take it your core message, at least up here, is that this health insurance approach you say is really (inaudible) proposition, diminished progressivity, increased health spending without any material differences in health care outcomes.

And I'd to put on the table as a possibility of some other benefit, and I'm not making this as an

argument, but I did (inaudible) your thoughts about it. One, I wonder about the role of the shift in financing is diminishing to Russia. I as doctor had the opportunity to be in China a couple of month ago, and thought that (inaudible) the privatization effort in urban areas out there. And one of the main reasons for the government, you know, (inaudible) privatization model as opposed to funneling more money to (inaudible) was to deal with the corruption issue (inaudible) separate the financing government delivery of care. You have continued opportunity for everybody that had their (inaudible) as the money floated down into the (inaudible).

(inaudible) questions become (inaudible) they'll just diminish corruption versus to what extent is that going to be a cultural issue so that (inaudible).

The other potential benefit is even when a more sophisticated health care system (inaudible)

outcomes, we seem to like it. (inaudible) and as a doc, I know (inaudible) secret of docs, which is (inaudible) poor people (inaudible). But insofar as we like all these things, the country is more likely to attract high-value workers, high-value industries, et cetera, when they have more sophisticated medical care for the same reason that cities are more likely to attract high-value workers, high-value companies that have culture and various other features that make (inaudible) drives that make it attractive.

So might these two things, the drop-off in corruption and the actualities, positive actualities that (inaudible) the benefit s of the health insurance as opposed to government-financing health insurance.

SPEAKER: (inaudible).

MS. LAGOMARSINO: (inaudible) as well. And my background is more as a policymaker as it pertains to actually increasing coverage within a population and doing the sort of (inaudible) dynamics of trying to

raise revenues and get (inaudible) come on board as supportive, et cetera.

So a couple of questions I have which I think are very related is what is the data on the satisfaction of people in these social health insurance systems, either the change of their satisfaction would be moved into special and public insurance from something else, or just looking at two separate populations in tax finance versus social health insurance. We see there's a difference there.

And then, secondly, just the popularity of reform proposals that have sometimes two different models. I guess I would hypothesize that at least in certain circumstances there would be more support for and popularity of little public social centers , social health insurance, and then there, you know, (inaudible), and I may be wrong about that. Just a matter of experience.

And if that's the case, if there's -- if the

difference is in outcome under the two models of relatively -- if there's like huge difference in outcomes in health, et cetera, between the two models, then doesn't it come down to really what you can actually do, feasibly, and that becomes the real question for actually moving forward on a policy basis? Or is there something so negative about social health insurance that would make you, you know, not do anything that would just sort of, politically viable alternative to raise revenues on -- for expansion of coverage in a particular location?

MS. GLASSMAN: Okay, there are 10 minutes, do you want to --

MR. WAGSTAFF: Sure.

SPEAKER: -- (inaudible) on --

MR. WAGSTAFF: That's a great point, thanks very much. Charlie's points first. Your first point, Charlie, I think you're right -- we need to distinguish between people who attain coverage as a result of an

expansion of social health insurance in a population. That's one place where we can see how coverage helps people's utilization services and probable outcomes (inaudible) projects (inaudible) change, as they get -- as they get financial -- as they get social health insurance.

That's an important question, but it doesn't address the system quite (inaudible) which is, you know, it honestly came about financing, and, okay, what model should they adopt? And that's really what I want to get at here. The big question is how do you finance health care?

Now, if you're sort of talking expanding coverage at the margin, you know, then you would need to get at the big thing of your question, you need to sort of aggregate up from all of those effects at the margin then (inaudible) to expand coverage, depending on your right to population up, whether you're locking it, whether you're covering those who are least likely

to benefit first, and so on. It would be quite a messy analytic exercise to get at that big system-wide question, Okay, we've lined everybody up, expanded coverage a little bit, and served the impacts at the margin as we've done it. Now what? What do we conclude? Should they have done it, or shouldn't they have done it?

And so this wholesale shift is not a neat way of getting at this big picture question as to what are the big system-wide impacts?

Some of your other questions I thought were great. I think they tried to perfect the tax, and align the intro with a --

MR. GRIFFIN: It's in good hands.

MR. WAGSTAFF: I'll definitely send you the next draft before sectionalize it and (inaudible) you give us a nod.

(Laughter)

But one thing I think I strongly disagree

with you on which is, you know, it isn't all obvious; it just what an economist would have thought, the finance, source of finance doesn't matter to health outcomes. That's not what this paper's saying. What it's saying is, the source of finance matters to how much spending there is in the system, and that seems also to make a difference to how many patients are treated, yet, despite the extra spending, despite the extra number of inpatient cases, there is no health outcome improvement That's different from saying, oh, well, you know, the amount of, you know, controlling for spending, controlling for -- controlling for the extra spending, controlling for the extra patients seen there's still no increase.

That's a different question, and, obviously, I would control it for the increase in the spending and the increased utilization of inpatient services, I wouldn't expect to find any increase, and where would it come from? I mean how would those health outcomes

happen? So the channels by which those (inaudible) did happen inside the (inaudible), the increased spending and the fact there were more people being seen in the system, and that's the bottom line. And that's not what is one An economist would say, actually I would expect that more patients are being seen and there's more money in the system. Hey, we should be seeing some of the showing up in (inaudible), and we're not.

I think that Mary Luisa said what I could say to work from your point is that we should replicate. I mean if we could have Maria Louisa Escobar in every (inaudible)you would be fixing the tax system, you would be increasing -- you would not only be fixing under a courting innovation, you would be improving the progress (inaudible) of the tax system. Unfortunately, the real world doesn't involve Maria Luisa Escobar's in agreement (inaudible) Ministry of Health

MS. ESCOBAR: I don't know what it has to do with me. It's just in (inaudible) threw it away.

MR. WAGSTAFF: Let's face it, the Colombian team in the Ministry of Health is a very dedicated and technically strong team. And I'm no really sure we would want, even if we were able to replicate it. Do we really want Ministries of Health to be the pioneer as a tax reform? I don't think so. I don't think we should be doing, hard as the health process is to lobby tax reform, is to do a better job of improving the progress of it, and improving and reducing of age on the reporting the whole system-wide.

I mean if we start carving out a little area for ourselves in social health insurance, and then hoping that there may be external benefit for the rest of the taxes and by us leading the way. I'm not sure that's really the way to go about it, or at least if these results turn into (inaudible), that the risk be strategy, because we could be putting a lot more money into the system and not getting any outcomes. And the benefits would be a more progressive and better-

performing tax system. Well, that sounds like the tail wagging the dog team.

Now, I don't see anything, looking at a lot of the work that the banks are doing on tax reform. And it's kind of interesting that very often countries in simplifying their tax systems and getting more revenues in the process, and, you know, the Bank now rigorously tracks tax reform across its supplying countries. And it's improving. And the Bank doesn't get into the helping countries improve their tax (inaudible).

Bolivia is a nice example. Bolivia is a case where they substantially modified their tax system, simplified it hugely, tax-take increase dramatically, and the health sector was one of the principal beneficiaries of those increased revenues. So spending increased in the years following this excessive tax reform.

Now, I agree we should be banging these

people over the head, but let's not switch to a different financing system so that we can show them how to do it. And I think Colombia is a lovely story, but it's a fairy tale to some degree.

(Laughter)

MR. WAGSTAFF: I agree. I mean the degree of freedom and it goes back your question about one of the benefits (inaudible) to reduce corruption, and the Chinese sort of wanting to put a -- extract, reducing the influence the Minister of Health (inaudible) over the whole system in the hope that the system could become less stressed.

I mean this whole question of whether we get more or less corruption as we move to social health insurance, I think is that a nonspecific debate. There's nothing harder than empirical evidence on a (inaudible) list. You know, what's an anecdotal evidence, or social health insurance systems with lots of corruption in them.

And I know the Minister of Health in China very well, and I did not show that (inaudible) corrupt, actually. And I think I could imagine that a lot of money would get lost if you had a (inaudible) size model in China, because the folks in the private sector there are much more (inaudible) than folks in the U.S. You know, they will squeeze every single cent that they can get out of the system, and, you know, but I think that this is an empirical question, and I think it must depend on the circumstances of the country.

Alex's question about phasing in the data roll from 1990 (inaudible) that's not an issue. But I think this question of user fees popping up in the Asian countries, and I'm sure there are countries there are less likely to contribute social health insurances, and it may concern -- many have equity concerns, also concerns about equity issues, but also issues brought more broadly.

And the use of the term "social health

insurance," I think here we should just take a KTT (inaudible), I think what happened was Jeannie Zent going around the world preaching this knock in social health insurance systems, got a little bit of push-back from some people, and said, "Oh, we didn't mean that at all, we just meant any system that provides some financial protection."
I think they know very well (inaudible), and we should just not be (inaudible).

Your comments about the dynamics and demographic transition and stuff like that (inaudible), I think these are all interesting questions. And the Germans, for example, are very worried about the social health insurance system because of the demographics. There's a lot of aging population there, and there are going to be less contributors. And that's
-- that is (inaudible) implications of the pensions, but also the resource base with social health insurance systems. And, plus that's definitely something that's

interesting to explore.

And I think the whole question of which system has the less volatility in revenues, I think that's important, too. It's an empirical question, and that will be (inaudible) for (inaudible) empirically.

And the International Agency base, I think, actually – (inaudible) will correct me if I'm not -- my impression is that part of the reason the WHO in Copenhagen has such good data is because the communists were good at collecting data. And that's tended to say that the demons in communism fell.

(Laughter)

SPEAKER: (inaudible)

(Laughter)

MR. WAGSTAFF: And timed contributions to entitlements improving accountability, a big question, definitely. I think this isn't the right laboratory to explore that (inaudible). I mean, you'll correct me if I'm wrong, but I think there are issues to do with

entitlements in coverage in ECA, but I think they're much more pronounced in countries where social health insurance hasn't been accompanied by a strong commitment to universal coverage. So whether we could get at the issue in the ECA region, I'd rather doubt.

And now, the question of sophisticated care what we'd like is issues that tick, and so on. And maybe I would [inaudible] that would be up front to say the health systems aren't justified in improving health. They're also about financial protection, and they're also about giving peace of mind reassurance. But if that's the case, let's figure out how much importance people do attach to that, what value they place on that. And then if we get results like this, let's say, okay, well, this looks like health's improved despite all those extra resources, give peace of mind (inaudible) and how much is that worth?

If we can't just have lots of high-value people like your classmates running around saying, We

ought to give peace of mind, and we're prepared to pay this, the sky is the limit in terms of how much we are prepared to pay, let's quantify that. And then we can ask about these tradeoffs.

(inaudible) satisfaction how they change those (inaudible), and it's an interesting question, and I think one issue here is the distributional question, because Chris was telling me before we started about the exposure to (inaudible). The lot of the core don't even know about social health insurance programs being brought out (inaudible). And so, they probably just draw a blank when you said, "Are you satisfied, or do you like this reform (inaudible)," they wouldn't know where to start.

And what's happening is that the Fund that was set up to promote enrollment seems to being captured by those who are articulate and know what's going on. Even though some people will say, well, that Fund was really designed to help enrollment amongst the

poor. And it's just the poor don't really know what's going on, you know. So it may be very popular that you may get a lot of inequality, and some just don't respond.

I'm not really sure I would always want to go with the most popular (inaudible) -- hard evidence, and (inaudible) distribution. I'm afraid I'm just a bit old-fashioned.

MS. GLASSMAN: Well, thank you so much for coming. I hope that this is the first of many conversations about this topic, and of your work.

Having worked in the fairy tales for eight years, I can assure you that it's not very (inaudible). But a painful political processes and all the rest.

And I would say that we're planning to invite Santiago Levy to come and speak on his work on the impact of Social Security systems on informality to hear another perspective about what kinds of shares should the impact of peril taxation on labor markets

and what that might imply for how you mix financing sources.

So thanks a lot.

(Applause)

* * * * *