

**The Consequences of Economic Inequality for Economic Performance**  
**December 2 – 3, 2014**  
**Columbia University**

**Tuesday, Dec 2, 2014**

**Introduction:**

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**Joseph Stiglitz, Introductory Comments**

- Inequality is one of the major issues of the day.
- Because the subject is so broad, we decided to narrow the focus to one aspect – the consequences of inequality on economic performance

**Danny Leipziger: Introductory Comments**

- CEG is working on growth topics - green growth, sustainable growth. If inequality was not center stage in the US there might be less attention on the topic. But there is interest in emerging markets as well.
- We believe it's useful to draw out what we know and what we don't know.
- We have a sense that there should be strong empirical evidence of the link, but it's hard to find, so we will see what you have to say
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**Stiglitz: Overview**

- The conference is focused on the consequences of inequality on economic performance, but this is only one part of the growth/inequality nexus. We can't really separate out the causes and consequences, which are interlinked. What I hope we'll do is explore the many different channels through which inequality affects the economic performance of a country.
- Many of the issues discussed here were on the fringe in the 1990s and are now mainstream.
- For example, James Galbraith has a book (*Inequality and Instability*, 2012) of the size of the financial sector and inequality
- There are some complimentary and reinforcing dynamics to examine - one example is the financial sector.
- The financial sector can lead to poor economic performance and inequality
- This argument is very different from 20 years ago when countries were trying to get a bigger financial sector, which we got.
- Since, Volcker has observed, no financial innovation led to improved economic performance other than ATM – which was a British invention
- The financial sector can be a source of instability and economies performing below the potential growth rate.

- Easterly, Islam and Stiglitz wrote a [paper](#) on sources the of growth volatility
- They considered wage rigidity and financial debt, and the latter was more important (it was U-shaped)
- This is complicated because instability leads to more inequality, even though some measures of inequality may decline in a recession
  - A dysfunctional financial sector can lead to relatively lower real investment, lower capital stock, lower wages, and therefore more inequality
- Also – other factors that simultaneously increase inequality and affect economic performance – Globalization for example
  - Standard economic theory predicted lower real wages in developed countries but not in developing countries
  - There are some positive economic performance outcomes, some not so much – Hamid for example shows economic liberalization shows less SME investment AND less growth
  - Globalization has also had impact on unions which effect inequality
  - The economic cost of inequality is not its only cost.
  - There are moral, democracy, and social justice effects
  - We cannot separate economics and politics
  - But even if you are not concerned with moral issues or issues of economic justice that fact that inequality is having an impact on economic performance should concern you
- Measurements: We deliberately used economic performance because we don't want to focus just on growth
  - GDP is not a good measure of well being
  - Median income may be better measure when inequality is growing – in US GDP goes up but median income goes down
  - Another major issue is insecurity, but if economic systems expose people to more risk but we don't have adequate social insurance, then well being goes down
- We don't have good measures of this yet – RI is working with OECD to incorporate better metrics
  - Health and education – Sen's capabilities – societal outputs are not perfectly correlated to GDP
  - Using the HDI adjusted measured US inequality goes from 5<sup>th</sup> to 25<sup>th</sup>
- So what are the measures of inequality
  - The Palma ratio: most of the action is in the tails (the top versus the bottom) versus the Gini
  - Some measures might be more related to economic performance or particular channels
- Inequality and macro-stability:
  - The argument is an increase in inequality reduces aggregate demand – the top had savings rate of .36, bottom had -10 percent savings rate in US before crisis

- Weak aggregate demand lowers interest rates and reduces regulations to spur bubble
- Bubble bursts and induces crisis
- I want to emphasize that it's not inevitable – you could do public investment. But it's a political choice
- Beyond measures, we need to understand channels of causation, so we can look at right measures
- In this story, the measure you care about is the MPC between bottom and top 5%
- Cross country comparisons:
- We care about global outcomes and we can also learn in US from global outcomes
- Economic forces similar in different countries in similar development stages, but outcomes are different in terms of inequality and economic performance
- American exceptionalism is that it highest inequality

#### **Discussion:**

- When you widen measure to include median income or wages, there is a contradiction between inequality and growth argument – because you can increase median income through distribution – so if there is no trade-off, then let's do it
- Now we can say that we don't if inequality undermines growth, it doesn't trickle down.
- There isn't a single statistic that reflects both economic performance and distribution
  - It is impossible to reflect distribution in one number
  - As we proliferate answers – what are the channels, etc? We probably don't want to proliferate questions –
  - There is a fairly limited correlation between measures of MPC and consumption, I haven't seen anyone link this in a way that nails it – we need to do that
  - There is a tremendous amount of evidence that there is inequality convergence across the world
- Are we interested in before tax and transfer or after – its an important question and one where you have to slide into broader societal views – both may have independent affects and we should keep to measures in the back of the mind.
- We need to consider how individual wages translate into family economic well-being
- Measurement is important, but it is also important how people perceive what we measure. Americans really care about GDP because they think GDP equals jobs.

- These are the right questions to ask – First, the emphasis on interaction between economic and political variables (finance, labor markets that shape macro outcomes); Second, inequality in relationship to security is important. Third tail ends of distributions (the top in particular in the US) are very important.
- We should take advantage of people in this room – these issues have been bubbling up for a few decades, but received increased focus in last 5-7 years. We are high point of the wave and how sustainable is that? The right hasn't really challenged "us" but how do we insure these issues stay central even if politics change.
- There are better measures than the Palma, which is not sensitive to the middle. There is American exceptionalism in inequality metrics too. Inequality nerds don't like 90-10 comparison.

## **Session I: Overview**

**Chair: Joseph Stiglitz**

**Paul Krugman, Bill Easterly, Jared Bernstein, Dani Rodrik**

### **Joseph Stiglitz**

- Inequality has gotten larger and we are talking more about it
- Standard economic theory assumed stable income distribution. Now we need to explain why distribution is not stable.
- At the World Bank we talked a lot about poverty, but now it is about inequality.
- Ignoring inequality was wrong. But poverty is paramount.
- Overview of some of the channels:
  - OECD report shows changing family structure effects inequality. But also with 1 in 5 children growing up in poverty, will have impact on economic performance
  - Rent-seeking
    - Resource curse - when major source of income is rents, those economies do not grow well, also have more inequality, which doesn't make sense because taxing oil can't make it leave. When you have inelastic supply of resources countries should grow faster and have less inequality but the reverse
    - Have advanced countries unwittingly become rent-seeking societies
      - Monopoly power
      - Abuses of corporate governance (CEO pay)
      - Many aspects of financialization
      - Market manipulation/exploitation – “fishing for fools” - insurance that exploits difference between subjective probabilities vs. actual risk
        - Have there been improvements in technology of exploitation

- Weakening of moral scruples: Norms change in the social status of snake oil sellers
- Lower education so we can have more people to exploit to make more money - E.g. children are easily fooled into non-nutritious food
- Increase in profits does not lead to an increase in societal welfare

**William Easterly: Global Inequality**

- Global inequality:
  - Global inequality is a huge deal, one of the most gigantic dimensions of inequality is difference between people born in Congo vs born in Sweden
  - Usually this is measured than GDP but that gets to economic inequality – there is a more fundamental issue - inequality of rights.
- Denial of rights of world’s poor keeps them poor, holds back economic development
- What do we mean by inequality of rights:
  - A world bank IFC project converting land into forests kicked farmers off their land in Uganda, made NYT
  - IFC never investigated and no one really protested
  - World Bank and IFC have never been held accountable. The non-event and non-protest is the canary in coal mine that illustrates lack of attention to equal rights.
- Economists like to think we are doing morally neutral analysis. But models are all based on individual choice – we assume choices – but we don’t take into account if increase in GDP is voluntary or coerced
- Institutions are key to investments (political and econ)
- It’s hard to imagine the Uganda story happening in the US
- Economic inequality based on inequality of rights is the most harmful inequality of all – both from moral and growth perspectives
- Sokoloff and Ingerman article:
  - North/South American divide in performance has to do with inequality of rights and the slavery dynamics. That is true within North America between North and South.

**Jared Bernstein, Which policies are pro-growth and equalizing?**

- Those that break the tradeoff between growth and equality.
- Economists have progressed beyond the idea that policies that promote equality reduce growth.
- PGEP – pro-growth equalizing policies
- Growth measurements I use are 1) output gap, 2) potential GDP, 3) measures of family and sustainability
- Policies that target output gaps
  - An output gap has not been temporary, based on business cycle.

- The CBO finds – unemployment has been above NAIRU 70% of time since 1980. Pre 1980 only 30% of time
  - A 10% decline in unemployment rate boosts low wages by 10%, median wages by 4%, high wages by 0%
- Fiscal and monetary policies (macro) that target output gaps are pro-growth and pro-equality
- The trade deficit has been persistent drag on growth
- Exchange rate policies are PGEPs – because they close trade deficit
- Financial market regulation is PGEPs
- Policies that target potential growth rates
  - Education – increasing both educational access and education completion. There are clear linkages between inequality of opportunity and inequality of outcome.
  - Immigration – increase growth through labor and also reduce inequality through reduced occupational protectionism at top (i.e. reduce rents to lawyers and doctors)
  - Micro-PGEPs
    - Safety net programs – EITC, food stamps, etc are consumption programs – but are also investment programs. Longitudinal studies show safety net program beneficiaries have higher incomes and better health outcomes etc, than poor that did not benefit from these programs
    - We have enough data to show that these are investments expenditures not just consumption expenditures but PGEPs
- Broader definition of growth
  - Better work life balance, sick leave, parental leave, vacation time
  - Sustainable growth is a PGEP because the poor bear the cost of environment degradation

#### **Dani Rodrik**

- How do we think about relationship between inequality and economic performance? In some sense this is an ill-formed question
- Inequality is endogenous. Growth is endogenous. What are the actual mechanisms?
- Early in the process of industrialization, greater inequality and higher growth are linked – this is the Kuznets curve.
- In higher income countries, skilled-biased technology change – increases the skill premium and the return to education, increasing inequality and raising growth.
- In another example, fiscal transfers provided through unsustainable channels improve equality but are bad growth. I.e., Venezuela: transfers to the poor financed by oil
- There is not clean unambiguous relationship between the variables. We need to discuss them within context of specific drivers.

- There is a different relationship between global inequality and within-country inequality.
- Some potential pushback – the last 30 years have been great for the world’s poor and this new concern with inequality in advanced countries is parochial and we shouldn’t care. Does decreased global inequality require increased within-country inequality in developed world?
- Migration would reduce global inequality. Would be the greatest inequality reducing policy, even without full citizenship rights.
  - But what happens to institutions in rich countries when lots of people immigrate?
  - High quality institutions – which may require solidarity, trust, legitimacy – national cohesion? All of these might be undermined by increased within country inequality or migration.
  - Collier and Borjas have argued that benefits of immigration are lower than we think
- Trade also has similar (but less marked) effects – in addition to direct income effects of trade – also on institutions in rich countries – trade bargains etc.
- Can we identify policies, which are good for global poor and rich democracies?
  - Policies that increase demand, investment, and education translate well.
  - Transparency in financial sector, taxation of financial transactions, global governance should not focus on reducing transaction costs but how can we enhance quality of institutions.
  - The above could be defined as global PGEs
- These are answers we have to have when asking why we should care about domestic inequality.

### **Discussion:**

- Yes, globalization has been good for poor, but maybe we didn’t realize the extent of distributional impacts for rich countries.
- Jared’s point on exchange rate – could use exchange rate in more aggressive way – there is a tendency to put the problem out there in the world. But these are domestic problems not just international problems
- Bernstein: there are tremendous linkages between out there and in here, particularly in US manufacturing. The argument is somewhat of a free market argument but there are global imbalances that may be the product of other countries keeping their consumption low to generate savings and export capital to import demand. This creates global instability.
- What about technological changes causing a global convergence of inequality?
- For, Bill Easterly, what is the nature of the rights you are talking about? And what about China? Limited rights huge reduction in poverty?
- On the question of exchange rates, the notion of market-determined exchange rates is a fiction. Every time the Fed changes interest rates, it affects the exchange rate. The WTO proscribes the right to have an industrial policy.

Exchange rates are the only tool. If China really removed restrictions, then China's rate would fall.

**Bernstein:** I was talking more about policy issues that no one in DC can talk about. The general belief is no one can talk about exchange rates except for the Treasury Secretary and even he can't talk about it.

**Easterly:** I am talking about basic economic rights and property rights. But also political rights, which go with economic, rights. The ability to protest when economic rights are violated is something that helps.

- This is different than positive rights – like right to healthcare.
- As for China, the theory of rights predicts that the level of rights will affect the level of growth. What we are excited about with China is the growth rate so we should see if there has been change. There are certainly more rights now than under Mao and we have seen the resulting growth. So it could be a coherent story. But it could be a challenge.

## **Session II: Theory and Empirics of Overall Macroeconomic Channels**

**Chair: Joseph Stiglitz**

**Andy Berg, Larry Mishel, Beth Ann Bovino**

**Andrew Berg:**

- The focus on our work at the IMF was on growth and the examination of determinants of growth spells. What surprised us was that inequality turned out to belong in the standard variables that one examines.
- This is a crude instrument in analyzing an economy and making policy recommendations. There are some useful conclusions.
- In the long run, as long as distribution stays constant, then the most important variable impacting the poor is growth.
- But if inequality affects growth, then you cannot separate the inequality from growth conversation.
- Historically, the belief was redistribution caused low growth, so perhaps the attempt to correct for inequality was causing poor growth.
- We used measures of disposable and market income to assess distribution.
- Redistribution is not actually correlated with size of government or government spending.
- Data is a challenge – and the data used is valuable but there are challenges.
- More Gini in net income is associated with lower economic growth and gets a strong negative result. There is less correlation between redistribution and growth.
- Redistribution is insignificant or if anything positive
- Even when considering many other factors, we find the inequality link is still robust



- A 3 Gini point move reduces growth by about half a percentage point
- OECD has replicated the study to the same results
- The results hold for a range of sample sizes. A sample of OECD countries gives basically the same results.
- Takeaways –
- Inequality does not impact growth through the fiscal channel.
- There is not evidence of overall harmful effects for redistribution (but of course depends how you do it). But the notion that redistribution is bad for growth cannot be taken for granted. So we should not over-obsess about redistribution.
- If you compare countries much of the difference in disposable income is about distribution. The US stands out in redistribution, not in market outcome.
- Inequality is not obviously a proxy variable for investment, or poverty, or shocks.

#### **Jonathan Ostry:**

- The IMF did not choose to focus on the issue of inequality per se. It's not a topic within our mandate. Our focus is economic performance. But during Occupy Wall Street, the Arab Spring, and other uprisings we began to look at the link between inequality and growth.
- I was struck by Bill's focus on econ rights and inclusive growth.
- Fixed costs prevent people from participating in networks, education, health, nutrition, even participation in financial markets.
- Are these important and what government policies can help?
- Also, we haven't talked about labor institutions. We find a strong link between the decline in union density and rising inequality even when controlling for other factors. Similarly, we see a link between declining value of minimum wage and inequality.
- Also we haven't talked about shocks.

#### **Discussion:**

- Why are your results so different from [Kristin Forbes' results](#)? Or [Martin Ravallion's](#) ?

#### **Ostry:**

- Differences are due to methods not to data sources. Seems that Kristen extended the time period she got same results as you.
- If you look at short time periods you get a different result.

#### **Discussion:**

- I recommend we look at wage inequality versus income inequality

- Why not investigate different definitions of inequality?
- There are more billionaires per capita in Scandinavia than the US but less inequality otherwise.
- It depends on what story you are telling. If story is that the reason we observe different amounts of redistribution is due to technological differences, the data won't show it to us.
- Story is different in preferences. Nordics care more about redistribution, yet you may still not find the relation between growth and redistribution.
- So, what is your story?
- We did not think of anything obvious about (external instruments?)
- Inequality matters for level and sustainability of growth.
- Messy data set, noisy

**Ostry:**

- Inequality matters and redistribution doesn't.
- But there is no specific focus on channels – shocks, investment, and human capital.
- But even if you put those channels on the left hand side, it doesn't reduce effect of inequality. There is a mystery.

**Larry Mishel:**

- Do we care about income inequality or mobility?
  - Income inequality versus mobility is largely a rhetorical issue. The idea that you can focus on mobility without tackling income inequality is absurd.
  - Obama pollsters found addressing inequality is not popular: white people giving money to black people.
  - Mobility is about next generation.
  - Inequality is about who gets what over the next 10-15 years
  - We know inequality shapes mobility
  - One of the firmest social science findings of recent years is that family income and circumstances affect performance.
- Income inequality is all about wages. The growth of economic inequality is mostly about market income.
  - Big growth in inequality of wage income
  - Big growth in capital income versus labor income
  - Big growth in inequality of capital income
  - A-B are all about labor markets.
- Recent research has discredited the skill-biased technological change argument
  - Among press and economists, assumption is income inequality is about technological change
  - On center left, people carve out exception for top 1%, but bottom 99% is all about technological change
  - Recent research has discredited that

- One argument is there is an education-wage gap – this is the Larry Katz argument. But in last 10-15 years this hasn't been the case. Wages for college graduates are stagnant
- The second explanation is job polarization. This is the David Autor argument that technology is eroding the middle-income jobs. But the evidence from a few papers on the 1980s-90s has no bearing on what happened in the 2000s.
  - A human capital solution to inequality is insufficient
  - College graduates getting jobs are earning a lot less
  - We have to address labor institutions

**Beth Ann Bovino:**

- The reason Wall Street cares about inequality is because we are losing customers. About three years ago we started seeing concerns at an IAF meeting.
- We've been watching economic performance and we've seen worst recession and worst recovery since Great Depression.
- We began to ask if there is more to this economic inequality issue. We all agree that inequality is a natural product of market economy. But at some point is too much. The question is what point?
- What happens when the only way can participate is through debt?
- Social mobility is hurt by income inequality. S&P and Hamilton project at Brookings are all showing decline.
- We look at primary and secondary education, which is a long-term drag for US economy.
- One channel is that in the race to the bottom among states, states have cut corporate taxes and reduced education investment in US.
- State-by-State, income inequality effects state budgets. When a large share of revenue comes from top percentage points, shocks to top cause shocks to budget.
- California, 50% tax revenues come from top 1%.
- There is a question of corporate governance and that is a regulatory issue, because it's all legal. We have been trying to figure out why businesses don't invest. Capital investment is flat. Drop off in training for employees.
- What is the story that explains inequality and redistribution not mattering?
- We can test many hypotheses, test whether
- Min wage affects inequality, or education,
- Germany can redistribute in a way that Zambia cannot

**Discussion:**

- Lots of interest in more research into the story driving the IMF data
- One piece of potential research is to quantify affect of off-setting factors in consumption when you take away tools for dealing – i.e. working more hours,

women working, making money out of houses, etc – then what happens to aggregate consumption?

- The MPC argument may not work because we may be discounting the capacity of the rich to consume.
- Minimum wage is now much more accepted. Because we realize it's not that disruptive and the rich think we need a crumb. But we need to talk about median wage. The challenge to talking about median income is it threatens a political system that prefers to nibble around the margins.
- The consumption and debt story is hard to tell, as we will see in the evening in Krugman's talk.
- Many countries see workers retire earlier than in the US. If you take out working older Americans, market inequality in US rises significantly
- A few decades ago there may have been economic rents, but it was shared (through institutional arrangements) with a diverse group of people. Perhaps the question is really about how to share rents.
- Unions have made concessions in pensions, insurance, etc, in order to maintain wages.
- Anything to maximize cash in hand.
- *Global Consumption and Income Project* can help to calculate any income inequality measure that you wish.
- Instrumental variables do not solve the problem to figure out how policy works in inequality.

### **Session III: The Finance Channel**

**Chair: Jan Svejnar**

**Salvatore Morelli, Steve Farrazzi, Atif Mian, Joshua Mason, Mike Konczal**

#### **Salvatore Morelli:**

- Evidence shows that the growing level of income inequality is not associated with banking crises.
- We distinguish between growth and level of inequality. If growth of inequality is not related banking crises perhaps high levels of inequality are.
- Even in expanded data set, no systematic association in the growth of income inequality.
- The data does support a link between banking crises and historically high levels of inequality.

#### **Steve Farrazzi:**

- We compare consumption data and income data in the US.

- The finding is: increasing inequality is reducing demand and causing the secular stagnation.
- Monetary policy can be used as tool in the short run but actually increases instability.
- Long-term trends in inequality aren't reduced.
- Reduced consumption since 2007 has kept demand low
- Even as little as a 5 percent difference in the MPC between top and bottom means inequality can lead to significant demand reduction when income accrues more to the top.
- There is a timing issue with consumption. Consumption was strong during most of period in which inequality rose. But the consumption was financed did that and we postponed the drag by borrowing.
- Some key points:
  - In 1980s slowing of income growth at bottom 95% and rising interest rates.
  - Debt-to-income ratio began to rise at the same time
  - The rise in debt-to-income ratio is almost exclusively a bottom 95% issue
  - When the crisis came, it about cutting off the finance channel
  - In the 95%, the consumption to income ratio remains stable for most of period, but in the top 5% there is a highly volatile relationship. The 5% are consumption smoothing.
  - The financial crisis was the inequality problems coming home to roost. The top 5% consume almost as much as bottom 80%. So that can drive growth but what kind of society do we want?
- Higher minimum wage could help, but wage growth rate would help more
- Fiscal policy can help, especially investments in infrastructure

### **Atif Mian:**

- We investigated the connection between finance and inequality
- Inequality feeds into finance
  - Inequality increases and there is a high savings rate of the very rich
  - That savings needs another side of the balance sheet – and that is seen in the rise in debt
  - This is not just happening in US. There is a global rise in leverage. Global debt-to-GDP has been rising. There has been no decline.
  - Also, declining interest rates since 1980s ...
- Finance feeds into inequality
  - By finance we mean debt or leverage
  - Rich lend more and more to poor
  - If a shock hits, levered state of less well-off means they will feel larger share of losses
  - The heterogeneity of MPC expands the impact of the shock
  - The levered see consumption fall more than un-levered

- Everyone is worse off – the output gap
- Monetary policy and redistribution
  - Easy monetary policy becomes a good tool
  - But this is a consequence of lots of other bad rules of the game
  - There needs to be more risk sharing in the event of a macro-shock and a redesign in the financial architecture
- Looking forward
  - Long-term bonds are the most stable assets in the crisis, but who holds it? The top 1%
  - The way monetary policy redistributes wealth does not really solve issue.

### **Joshua Mason:**

- Propose a consistent accounting framework to describe evolution of private debt-income ratios as an independent driver of inequality
- We looked at the dynamics of household debt-to-income:
- Historical accounting of household debt shows a long-term increase in the post-World War II US economy.
- There is a sharp rise from 1929 to 1931, which is caused by fall in denominator not rise of numerator that causes climb.
- The argument in the paper is this dynamic (fall in denominator) is more of the story than rise in numerator.
- Borrowing does not equal dis-saving
- Small role for new borrowing in debt / income ratios
- Except in 1950s and 2000s housing booms
- Borrowing is not just consumption spending, borrowing is the difference between cash income and cash expenditure
- We can separate out effects of interest payments and inflation based on public sector formula
- The action is not primarily on household borrowing side
- The biggest factor is characterized by high nominal interest rates with lower growth of income
- In the 70s, 80s, and 90s, households are running primary surpluses but household debt-to-income ratios rise. The channel is disinflation combined with high nominal interest rates.
- Key to this story is that the low FF rate is not the effective interest rate paid by households. The effective household interest rate rose sharply and fell slowly through the 80s
- 1946-1983 Household debt / income ratio = 1.5
- 1984 – 2012 Household debt / income = 2.8
- Aggregate demand and private debt don't always move in the same direction
- Since 1980, household debt increases sharply, but in fact credit extended to households does not increase. There is almost no net credit extended to households. The increase comes almost entirely from increased interest payments.

- If household expenditure remained constant, but growth, inflation and interest remained constant, debt would have remained constant. If households faced the same macroeconomic conditions, there would not be the rise in household debt.
- This means we need to focus on macro-conditions and not household behavior.
- We have to be careful about simple stories where we say rising debt supports aggregate demand.
- In 2008, households start repaying debt, but the income-to-debt ratio does not decline because income declines significantly
- Conclusions:
  - Long-term increase in household leverage is not increased borrowing but higher interest rates relative to nominal income
  - Household debt does not reflect just distribution, but is an independent driver of inequality
  - We must focus on inflation and interest rates as distributive variable. Specifically, they have led to significant redistribution up the income bracket
  - This is a return to Keynes-Sraffa tradition in which interest rate is a key barometer of class conflict

### **Mike Konczal**

- Definition of financialization:
- Growth of the financial sector
  - As finance share of GDP and profits grow. Finance and insurance value added as % of GDP 2.5% in 1947 and 7.5% in 2007
  - It has not reduced unit costs. It has not become more efficient. What is it doing?
  - Financing increasingly geared towards the top 0.1% of income
  - 75% of growth is the result of two things – asset management fees and household credit – not particularly productive.
- Shareholder Revolution
  - The change in corporate governance pushes corporations to pay out more to shareholders instead of put money into capital investment.
  - Before, for each \$1 borrowed by firms, \$0.40 would be invested
  - Now is close to \$0.00
  - Firms now borrow to pay out dividends
  - At the height of the bubble shareholders were cashing out the real economy.
  - Dividends plus net share repurchases increased dramatically during stock and housing booms. Wealth going to the top 3% has increased rapidly since 1992
  -
- Economy managed for wealth
  - Labor share of income has been declining – to what extent are high returns (r) to capital structured into economy

- Changing policy goals
  - Campaign contributions from financial sector increased since 1990
  - Changes in bankruptcy law works for Wall St and against consumers
  - Explosion in student debt
  - Tax policy benefits the rich disproportionately
- Market society:
  - An ideology around private provision instead of public provision of goals
  - Explosion of student debt has an impact on inequality and growth
  - State budgets coming from user fees
  - Privatization of public goods

### Discussion:

- Steve and Atif successfully connect leverage to a decline in demand. I don't get a connection between increased inequality and that outcome?
- Composition of assets is important. The rich and poor own different kinds of assets. And if you married this with life cycle analysis you would see more divergent groups. This is important because of the tool of monetary policy. The effect of low interest rates is to transfer income from life cycle savers to capitalists and equity owners.
- In what way has the difference between T-bill rates and effective rates contributed to inequality, and why has that happened?
- Better risk sharing arrangements would have changed outcomes – and a policy agenda could address that:
  - Income contingent student loans
  - Income contingent mortgages
- **Krugman:** Reiterates Josh's point about debt increase in depression
- **Mason:** Student loans aren't that big as a share of household debt – just about 10% - about equal to credit cards and auto loans. Then if you are talking about debt service, credit cards and auto loans have much higher interest rates
- In the inequality debate, you note that it is not just the poor who are borrowing at least in the US that is not true. But from a macro perspective it doesn't matter who borrows just that someone needs to borrow.
- **Fazzari** – could you have a rise in leverage without a rise in inequality? Of course. Inequality is more related to the secular stagnation story. The shift in income from a high MPC to a low MPC population will reduce demand.

### Session IV: Theory and Empirics with a Focus on Globalization and Related Issues

Chair: Jan Svejnar

Branko Milovic, Dani Rodrik, Ed Wolff, Hamid Rashid, Alex Cobham

Branko Milovic



- Globalization has reshuffled international income to the greatest extent since industrialization.
- From 1988 – present
  - Global middle class (China middle class) has seen incomes double
  - At 80% global income (US lower middle class) almost no growth - the poor in Japan, Germany, and the US have gained the least.
  - The global rich have gained the most: nearly 62% of all absolute income gains since 1988 have gone to the top 5% of the global population.
- For an individual country no chart looks like this
- Income and employment largely determined by global trends
- Policies are decided upon and implemented at national and regional levels.
- Middle class stagnating income. Will they continue to support globalization?
- Countries with more inequality at the beginning grew more slowly.
- These findings have big political economy implications for populism and plutocracy
- Asian middle class leading to populist uprisings
- Western lower middle class political issues unsustainable
- Finally, there is the emergence of the global plutocracy
- They lack of interest in investing in public education, health, and infrastructure.
- As the rich gain more economically and politically, they lack incentives to change course.
- Need for redistributive policies at national level.
- Inequality is transmitted across countries through forces of globalization
- Inequality today will lead to more poverty in the future.

### **Dani Rodrik**

- I am going to talk about the patterns of industrialization vs. de-industrialization.
- The sample size is different countries at different incomes and stages – this is a global phenomenon
- Industrialization has generally boosted incomes in the developing world while resulting deindustrialization in developed world has increased inequality.
- Share of manufacturing employment rises and then falls with GDP per capita
- Declining manufacturing share as percentage of employment is not new and not over. Started in the 1950s and not just a product of globalization.
- Most of these declines are in low skill shares
- So there is extremely rapid skill-upgrading
- Therefore: the skills requirement of the manufacturing industries in the countries now industrializing are much higher.
- It is harder and harder to absorb low skill workers off the farm
- More recent industrializers are peaking at lower share of manufacturing employment.
- Consequences:

- For growth – this reduces convergence opportunities. Services cannot substitute because they are not tradable.
- For inequality –even successful manufacturers are more plugged into global supply chains and does reduce the same kind of spill-overs that growth the middle class and it is not clear petty services can produce the middle class
- Political democracy/institutions
  - The absence of an organized working class and diffuse/diverse interests reduces the incentive of elite to cut deals and create democratic institutions
  - Instead we see periodic civil disturbances without sustained follow through

## Ed Wolff

- Household wealth trends in US
- What has happened to median wealth and wealth inequality during the great recession?
- Stocks and home prices increased 2001-2007
- Asset prices fell between 2007 and 2010.
- Stock prices have since more than recovered their full value
- Home prices have barely recovered. While mean net worth has increased significantly, median net worth has declined since 2007
- 6 Puzzles:
  - Median wealth surged since 2001-2007, median income did not.
  - Wealth inequality was flat 2001-2007, but income inequality grew
  - Median wealth decreased significantly from 2007-2010 – much more than median income and more than housing prices
  - Wealth inequality increased from 2007-2010 but income inequality decreases and stock and housing prices declined at about the same rate
  - Median and mean wealth were flat from 2010-2013 when asset prices recovered.
  - Wealth inequality increased moderately from 2010 to 2013 when income inequality increased and the stock/house price ratio rose significantly
- Answer to the first four: leverage
- Answer to the fifth: ownership rates declined.
- Answer to the sixth: leverage
  - The middle three wealth quintiles have much higher ratio of debt-to-net worth, and have a much higher concentration of wealth in homes.
  - It's not just that middle class was overleveraged and assets were different – there was also substantial dis-saving
  - Then returns increase and if middle class had kept their level of wealth there would have been growth – but had reduced ownership of assets.

## Hamid Rashid

- There is renewed recognition at the UN that inequality is a major issue
- But the conversation at the UN is premised on a moral imperative to address inequality
- There is an effort to replace MDGs with more focus on inequality
- But at UN we are not so interested in within-country inequality but across country (within country is an issue for sovereignty)
- Certainly there would be pushback from developed economies to address financial sector at UN
- The highest level of inequality right now is in S. Africa
  - When S. Africa opened up it didn't receive lots of FDI rather lots of portfolio income
  - It is the most financialized economy in the world, except for Hong Kong.
  - It also has very low real investments.
  - FDI is approximately zero. It has an outflow of FDI.
  - Private investment is extremely low.
  - S. Africa de-industrialized very early on
  - South Africa has world-class infrastructure but low investments in education and health.
  - COSATU has brought about very rigid labor market and high wages.
  - Manufacture and retail operation moving to financial credit operations.
- But this is not just situation in S Africa
- Convergence of macroeconomic policy to a "bad" equilibrium.
- Deregulated financial markets.
- High interest rates.
- Short-term flow of funds makes it difficult for long term gains
- Globally, there are policy changes around social insurance that reduce inequality, but there hasn't been long-term trends to reverse macroeconomic policies
- What kind of political economy arguments do we need to make

## Alex Cobham:

- There are three problems with measuring inequality – bad measures, bad data and bad people.
- Bad Measures: The value of the Palma is not that it should replace the Gini but rather that it points out distribution issues missed by Gini
  - No single number can measure the distribution
  - We are using the Gini without really understanding the value-judgment that it makes
  - Problems with Gini
    - It under-measures tails

- It under-measures extremes
- Palma is not perfect
  - But it is very clear about what it is measuring and what it is not
  - How Palma changes things-
    - UK wealth inequality was reported as relatively stable during crisis (according to Gini it was stable) according to Palma there was a large drop
- Bad Data:
  - Underestimates incomes at the top.
  - At bottom of distribution: excluded 6 groups: the homeless, those in institutions and nomadic populations; those living in fragile, disjointed households,
  - Excluded those in areas facing security risks and in informal settlements (by under sampling).
  - 3.5% of poorest people going largely uncounted – even in ‘best’ counting approaches.
  - At top: some estimates raise income by 5%.
- Bad People:
  - Miss undeclared income – when you include undeclared incomes the change may be similar to including tax versus not tax data

### Discussion:

- There are many different measures that should be used and each measure should be an answer to a different question. One option is the miser index – a miser index measures the degree to which a small elite accumulates wealth and the rest of the society lives in poverty.
- The point about unions and worker industrialization does not necessarily sound right. It’s not necessarily clear that unions are related to democratic development.
- Rodrik’s de-industrialization argument is pessimistic and has serious implications for growth and the danger of low-income countries getting stuck in a low-income trap they cannot trade out of. But there may be new globalized ways to increase learning that provide a more optimistic outlook
- For inequality measures, Branko’s graph provides a fuller picture. Incidence curves allow you to chose the data point that is most compelling.
- Also agreed that we need to find a way to correct for discrepancies at the top. For example, UK combines tax returns data and consumer surveys to provide better data.
- Response to development discussions at UN – financial flows may be necessary but the current financial sector works for whom? If it’s not extending long-term

credit and it's not financing SMEs, then what is it doing? Even retail now is a guise for financialization with retail chains extending credit to consumers.

## **Session V: Theory and Empirics with a Focus on Politics, Socioeconomic Opportunity, Trust and Social Inclusions**

**Chair: Jan Svejnar**

**Damon Silvers, Jacob Hacker**

### **Damon Silvers:**

- The intersection between inequality and social issues and trust through a political economy framework
- On the eve of 2014 election the AFL-CIO polled the voters in swing states. (An electorate that skewed older, whiter and from redder states)
- 54% said family income was falling behind the cost of living
- 33% said it was staying even
- 8% said income was going up faster than others
- People perceive that the party occupying the White House is running the country.
- Democratic candidates had to answer to this.
- There were some who spoke to this problem in a way that built trust.
- But those that ignored it lost badly
- This tracks data from Piketty
- 1935-1980 – the New Deal regime
  - 69.7% growth went to bottom 90%
  - 7.1% goes to top 1%
- From 1997-2012
  - Top 1% gets 71.8%
  - Bottom 90% sees income falls
- We can measure wages but not security
- Extreme inequality –
  - 8 people (Koch brothers and Walton Family) have \$230 bn net worth or the same value of 44% of the country (with almost no assets).
  - These 8 people have more power than those 150 million Americans.
- The mainstream democratic argument is the majority of Americans don't have skills to compete – so increase training, increase EITC and increase minimum wage.
- That implicitly suggests that the decline of workforce has nothing to do with rising wealth of the top.
- This argument has reduced trust and fails to tackle the problem at the root.
- The root is - a generation of public policy that have led to wage stagnation.
- What is connection between rise of 1% and decline of 99%

- Is it true that workforce is less valuable or is it rents?
- We can attribute this to a number of factors from full employment, public investment, trade, but more importantly, it is the interaction of these variables.
- A linear approach doesn't tell the story.
- For example – if you want to talk about the decline infrastructure investment you have to talk about decline of labor's political power, corporate America's lack of interest in US because business is conducted elsewhere, and the rise of political groups funded by top 1%.
- A right kind of inquiry requires a three dimensional approach that includes economics and politics to lead to political economy
- Policy solutions and a policy agenda need to attack the nexus of economic and political power
- In the same poll as mentioned earlier, there was bi-partisan support for each transformative agenda item
- Citing the problem as technological is wrong-headed. Technology is a political issue not a technical one. We decide who and how we use technology.

**Jacob Hacker:**

- We need to push on the links of rising inequality, the effect that has on politics and the result on growth.
- This is a transition belt
- Political scientists also think the effects on democratic politics are important in themselves – regardless of growth – but I will push further
- The assumption is that in democracy, rising inequality will get electoral push-back as most voters don't want inequality
- Also, we want to focus beyond income on broader outcomes
- Health, for example. The US used to have the tallest average male. Now we do not. The failure of the US to translate massive spending on health care to health gains suggests measuring income is not enough.
- I don't want to dismiss rent seeking. Political scientists are very dismissive of rent seeking – saying that it's hard to find connections
  - Business expenditure on lobbying has increased from 1983 to 3.5 billion
  - In some industries (finance, health, energy) the effect of rent seeking on "human flourishing" may be clear but otherwise the link is not always causal
- But this is NOT just rent seeking
- Coalition dynamics and unequal influence are two political channels
- Unequal influence
  - When there is divergence between top and middle or top and bottom, the top wins out. (Marty Gillan)
  - The elite might benefit from campaign spending
  - The rise of the working rich – means there is different than elite of previous generations

- Bartels, Page etc poll rich around Chicago – their opinions were different than overall population
- It's not that middle and low-income influence has declined – it's that any policy change has gotten a lot harder to achieve so you need lots of support. This rarely happens without rich.
- Preference distortion – less about psychological confusion (don't know interest) but more about systemic distortion – don't trust system
- Party preference:
  - Bartels – historically, Democratic administrations do better in terms income growth for most of the population, so why doesn't the population vote that way?
- Income inequality leads to polarization
- These mechanisms could be crucial feedback loop and reinforce systematic distrust

### Discussion:

- Their may be bi-partisan support for solutions, but as Jacob described the distrust of government is enormous. How can the distrust be overcome?
- Are there examples when majority interests win in the face of opposition from the highest income?
- Also, if fact is rich do well under Democrats is there a way to change to the perception that the rich do worse under Democrats?
- As political scientists and economist we need to think about the best government model to negotiate inequality and class politics. Why doesn't the median voter model work? The poor can be divided largely by heterogeneity.
- Preference distortion requires that we take it too much for granted that people's interests are narrowly defined. Rodrik has been doing some work on the difference between Republican and Democratic ads. He found that the lower income level of the median voter in a region, the more republican ads focus on moral issues. These interests are real and may mediate the median voter model.
- If you look at responsiveness of actual policy to the stated interests of median voter, then you do see some responsiveness. It's only when you throw in preferences of the rich that you see the distortion
- One of the most important public goods is the pursuit of public goods – and because it's a public good it will be undersupplied. So you need things like unions or other collective action.
- The median voter model only works under single peak preferences and we don't have single peak preferences.
- WDR is coming out with a development report on how watching TV changes development outcomes.
- "If you get people to smoke poisonous things, you can get them to believe poisonous ideas".

### Hacker:

- Political scientists have not paid enough attention to trust. Redistribution requires trust. You can have one political economy argument for how inequality rose and a separate argument about why it is hard to correct.
- Failure of government to act (drift) is just as problematic as government action. Tracking presidents talking about government it shifts decisively negative in 1970s regardless of partisan politics. Eisenhower was much more positive about government than Clinton.

### **Silvers:**

- I use the word regime constantly – it's not Democratic or Republican. The policies have been enacted by both R and Ds.
- The question was: will taxes and transfers work and the answer is no. And we know that because of the EITC which moves a lot of money and there is no political support.
- Public distrust – public trust began to rise in 1990 until 2009. It was fundamentally undermined by a poorly explained stimulus and the bank bailout.

### **Keynote Address by Professor Paul Krugman:**

- I am not an inequality expert; I just play one on TV. I am consumer of this research not an original researcher on this topic.
- I may be playing devil's advocate here.
- I want to issue some warnings:
- This whole conference has been about what are the ways inequality has negative impact on economic performance. So we think we are moving past Oken position which said inequality is bad but doing something about it requires trade-offs.
- But the real discourse out in the real world is that it is evil to even talk about inequality.
- There is a real belief that trying to address inequality will have catastrophic results.
- Don't aim to oversell the argument that more equality is good for the economy
- Better to say that we can do a lot to address inequality without hurting efficiency.
- We also don't want to be too greedy in our arguments. If we go for a not-to solid argument about inequality hurting the economy we lose credibility.
- The Oken view, which is left of the general discourse, is that while we don't like inequality, addressing it has a price.
- All the evidence at the conference – whether it's the Ostry or others – are regressions. They can be revelatory, but I worry a lot about this method.



- Look at specific channels, for example, health care and education.
- Pair wise correlations between growth and inequality by country, 1990 – 2013
- All of these versus growth, they help make the case
  - US was not that unequal. Scandinavia and the Netherlands have very low inequality and good growth rates. This is a good story.
  - Child poverty, US is more of an outlier even in 1990. But Scandinavia story.
  - Top income – US is outlier. But less clear story here. Don't seem to pay a price in growth.
- You don't need to believe that there are huge payoffs to see this as a win. We are saying that there is no cost and that is enough.
- Reducing inequality is a good thing if you can do it without reducing economic performance and it seems you can. (or without causing catastrophe)
- This is not particularly sensitive to dates. (Although Denmark has had very bad growth since Crisis)
- What could you do to make this better?
- If we have stories of how reduced inequality increases growth – then we have intermediate variables. So we could make those points.
- We have huge evidence on education. But what we don't have is a lot of evidence linking educational access to growth.
- We have some good information on the US War on Poverty – we have some natural experiments from people who got early access in late 1960s. We see improved health outcomes. The economic stuff is there but weaker.
- Internationally we could look at episodes of land reform and other controlled experiments.
- We have skepticism of cross-country regressions on growth performance. We need better stuff.
- The MPC argument is a good story. But it's not clear in the data. This is not an argument we can feel secure in.
- The story gets dangerously close to the argument that the government forced Wall Street into making loans to people who couldn't afford it.
- Highest debt levels are Sweden and Norway – but it does cause skepticism
- So what should we do?
- We could look at inequality in the run up to crises
- You could look at cross country comparisons of extreme shocks – these have happened in countries with very different levels of income inequality
  - In the Nordic financial crisis in 1990 – very familiar situation. How does that crisis compare?
  - Consequence in Sweden is pretty similar to US situation today both in severity and duration.
  - Even if you tell the political economy story that inequality leads to deregulation – they didn't need that in Sweden to deregulate

- This is just a cautionary tale. Bring as much research to bear as possible. And do not be greedy in the arguments. The fact that we're talking about how much inequality hurts growth is already a huge win.
- Questions:
- Are we barking up the wrong tree looking at inequality and growth?
- Inequality doesn't seem to be a word that resonates, but the 1% resonates. If you say inequality – consciously or not people think you are going to take from them.
- Inequality and growth might sell with the elite. But there is a limit to that.
- It's not just self-interest, but the elite totally buys into the idea that the deficit is the biggest problem with America. Why do they believe that? It's just bad macro. I don't know why?
- The good stuff is that anything that helps undermine the lazy conventional wisdom is good (whether its deficits or skills issues)

### **Wednesday, Dec 3, 2014:**

#### **Keynote Address by Lord Adair Turner**

- These are important issues but they are complex and we need to be aware of the complexity.
- I'm not going to focus specifically on the financial industry. But I'm going to define areas for further research.
- In order to think about inequality, jobs and stability, we need to think about the changing nature of the economy.
- The new economy is high tech and high touch.
- Inequality has two features.
  - The bottom 30 percent falling away from the median.
  - And the top 1% doing much better than the median and 10%, but the 1% losing out to .1% who are losing out to .01%.
- Why?
- Multi-faceted
  - Globalization does have an impact at the middle end.
  - At the top end, social mores are important. Compensation for top executives is somewhat circular.
  - Financialization of economy is important as it is associated with very high pay rates and the sector can take advantage of high rents.
  - But I will focus on technology. I do think there is something about modern technology that makes it a driver of inequality.
- We know technology is driver of rising GDP per capita.
- In 20<sup>th</sup> century we believed technological progress was a tide that would raise all ships. But that is not necessarily true.

- In the early 19<sup>th</sup> century, average workers did not gain in real wages from rising GDP per capital in Britain. This is described as Engels pause. This is the period of the Luddite revolution. This was over 30-40 years.
- Only in the mid to late 19<sup>th</sup> century does technological progress translate into rising wages for average workers.
- My hypothesis is there is something about communications technology that makes it deeply unequal in its effects.
- The market value of companies compared to employees shows the new challenges of new technology.
- The huge equity value is created with very few jobs and very little capital investment compared with industrial era firms.
- Something about ICT is distinctive.
  - Moore's law allows exponential progress.
  - Zero marginal cost for software.
  - Huge network effects.
- I am convinced they are driving the new economy and it's only going to cause more extreme change.
- I am optimistic we will see growth, but not equitably distributed.
- I think we will see automation at the low end and this will be problematic.
- At the middle end we may see more automation, but the high end may get higher because of returns to making robots, software etc.
- At the high end it is difficult to tell if it's returns to capital, rents, returns to high skills.
- It is difficult to make sense of the \$170 bn market value of companies.
- But these changes don't apply to the whole economy.
- The BLS thinks there will be a small growth in jobs from designing computers or software.
- The jobs will come from face to face service jobs – or high touch jobs that we don't know how to automate. So we will create jobs but because of the army of people in need of work the returns will likely be low.
- As people get richer one of the things they spend money on is things of subjective value. The highest value skills are in creating subjective value – fashion, restaurants, etc. So the other source of value is “high-touch celebrity rents”.
- We see superstar rents to soccer stars, models, etc. Because huge amounts of money can be spent on subjective value as opposed to intrinsic value.
- This world has a pervasive effect on wealth. Land value increases enormously.
- Piketty's story is largely a real estate story. Over the last 40-50 years there has been a dramatic increase in value of urban real estate.
- This means there are two potential sources of wealth:
  - Piketty – savings and investment
  - Relative price effect – if the increase in a price of an asset grows faster than economy then wealth goes up
- The ICT economy creates wealth with very little capital investment. Companies have little capital investment. Land has little capital investment.

- The relative price effect accounts for about 60% of Piketty's story.
- Why has urban land value risen?
- An income elasticity of demand for locationally-desirable land.
- If the supply of the locationally-desirable land is inelastic, then prices go up.
- Then it becomes an asset class.
- Private domestic credit drives further increase in the value of this asset class.
- Banks are doing the easy form of lending – lending against collateral.
- This is very unstable – because there may be no equilibrium.
- The bigger the wealth to income ratio with leverage driving it – the more unstable the economy will be.
- The combination of factors – the need for leverage to acquire an asset, and that those who need most the leverage are likely to be wiped out by instability - magnify inequality.
- Key aspects to consider:
  - Technology
    - Moore's law
    - Zero marginal cost
  - Preferences
    - Status and scarce supply/subjective goods
  - Irreproducible assets:
    - Land, Brands, IPR
  - Credit and Money
    - Infinite supply
- We need a new production function that takes into account land – not in its productive capacity but its luxury good capacity.
- So how can we tackle inequality?
- Accountability and transparency
  - Bringing transparency to remuneration committees drove higher pay.
  - There may be rational private returns to high pay to CEOs, but not socially relevant.
- Skills
  - The all-purpose answer to inequality from rich liberals who want to care but don't want redistribution.
  - Skills have very little connection to success at the top end – because of network effects, winner-take-all etc.
  - At the lower end, we may overstate the ability of lower skilled workers to catch up

### Discussion:

- How does the story of land take into account climate change?
- **Turner:** Important but orthogonal. What I think is important is looking at effects of Urban geography, clustering, and leverage and wealth.

- Germany has had different experience with land than France or England.
- This is not just about population density.
- **Comment:** The real price of housing when you adjust for inflation has increased on average by 0%.
- **Turner:** In the US this varies significantly by location
- **Stiglitz:** Piketty argues capital gains amounts to 22% of gains. I couldn't find that. Wondering if you found that?
- **Turner:** We found that in US we could not explain the rise through capital accumulation. I emailed Piketty and he agreed that real estate was key piece of the story in the US.
- **Stiglitz:** There are models where you can calculate value of land as a function of transportation costs.
- Also, interesting point about the labor market providing private returns that are different than social returns.
- What is the economy if we take techno-optimism to the extreme and everything is done by robots?
- **Krugman:** Data dispute on housing prices showing zero growth. This brings back Henry George.
- **Turner:** You do need to think about taxation responses to this. A tax on land would potentially provide a redistribution effect on something that doesn't change behavior.

## **Session VI: Country and Regional Perspectives**

**Chair: Danny Leipziger**

**Francisco Ferreira, Nora Lustig, Juan Gabriel Rodriguez, Kalle Moene, Jan Svejnar, Jody Heymann, and Sanjay Reddy**

### **Francisco Ferreira:**

- Inequality and growth affect each other.
- **Caldor:**
  - Believed with big difference between rich and poor there would be savings and that would cause more growth.
  - So there is a tension here between what we were arguing yesterday.
  - Maybe this is a long term/short term issue.
- In the literature we see three phases:
  - Phase 1: inequality bad for growth – 1990
  - Phase 2: inequality is good for growth – 2000s
  - Phase 3: we shouldn't look just at Gini or just at growth
- Therefore, evidence is suggestive but not conclusive because of endogeneity of effects.
- Inequality is an equilibrium summary of the economy, like growth. At this level of aggregation you won't see clear causality.
- Inequality may be bad for the quality of  $g^*$ .
  - Growth is more poverty reducing in less unequal societies.

- Maybe lower economic mobility w inequality and more inequality of opportunity.
- It may not be appropriate to look for causality at this level of aggregates.
- Africa:
  - Last two decades there has been growth, but poverty is falling less quickly than we would expect.
  - There has been a lot of inequality in Africa in the levels.
- East Asia reduced poverty much more and more quickly.
- Growth elasticity of inequality reduction is low in Africa.
- Because: high inequality in Africa to begin with. 7 of the top ten most unequal countries are in Africa.
- Also, inequality in the distribution of  $g^*$  low at the bottom, high at the top.
- Great differences between countries, sectors, resources, other.
- More growth in the natural resource rich countries with high inequality.
- But some resource-poor countries have done well.

### **Nora Lustig: Facts puzzles and surprises – Inequality in Latin America**

- Inequality in Latin America –
  - 1990s saw tepid growth, stable high inequality.
  - 2000s, higher growth and generalized decline inequality.
- The decline is true across countries.
  - Regardless of measures
  - Whether the politics are right or left, whether they were commodity or non-commodity producing countries.
- Our aim is to understand what is behind decline of inequality in Latin America. It is a different story. It has been rising in other regions.
  - Labor income inequality decreased, capital – i.e, remittances – increased, transfers increased.
  - Wage structure effect is equalizing.
  - Endowment effect is un-equalizing.
  - Paradox of progress
    - The lowest skilled – people with primary or less saw the most increase.
    - Wages for the highest with tertiary saw decline.
- Brazil
  - At the bottom – rising minimum wage in Brazil, a number of things have narrowed the gaps in gender, race etc.
  - At the top – decline in skill premium with an increase in number of tertiary graduates.
- Mexico
  - Similar in Brazil – wages up at bottom and down at top.
  - At the bottom – no minimum wage, but still saw increase – probably due to integration with the US.
  - At the top – relative supply of people with tertiary education increased.

- Educational upgrade has taken place. That is a common factor in Latin America.
- Markets don't generate equality but families, charities and governments do.
- *Commitment to Equity Project*
- Asia redistributes less, South Africa more.
- Is there a Robin Hood Paradox? More unequal countries redistribute less.
- In fact, in Europe and Latin America: more unequal redistribute more.
- When you add effect of indirect taxes and subsidies, more unequal countries redistribute more.
- After transfers and taxes poverty is higher in several countries.
  - Indirect taxes increase poverty above market income.
  - Tax and transfer systems can be equalizing but poverty increasing – because one is about relative incomes and one is about levels.
- It is important to keep poverty and inequality analyses separate and related.
- Tax and transfer systems can be equalizing but poverty increasing – because one is about relative incomes and one is about levels.

### **Kalle Moene:**

- Large wage differences before taxes and transfers lead to larger welfare state, smaller wage differentials then smaller welfare state.
- Scandinavia fits into a pattern, not particularly special – not about homogeneity or equality ideology.
- Lots of conflict strikes in the interwar period, so homogeneity of population argument is weaker.
- There are differences between countries. Small size of countries is advantageous.
- But great compression in the 1940s - 1960s followed by more inequality since 1980s.
- Homogeneity of income was created by the Scandinavian model
- Real competition occurs in institutions and in creative destruction, not in overall wages
- After Second World War, invest a lot in institutions to promote competition – the economy is very exposed in international competition.
- Employers are highly organized, and have a lot to say for welfare state and wage compression.
- External competition created lots of internal cooperation.
- Political and economic reinforcement.
- Different types of wage earners speed up creative destruction within companies.
- Wage moderation increases creative destruction, wage compression supports profits!
- This has eliminated low productivity firms and invited high productivity firms.
- Reinforcement: compress wage distribution by collective decisions you get high productivity firms, reallocate labor from low to high productivity firms.
- Productivity gap is narrow than in the US.
- More support for policies that are redistributive when wages are compressed.
- There is an equality multiplier because these welfare policies feedback.
- But with shocks you have inequality multiplier operating since the end of the 1980s.
- Socialist security complement capitalist dynamics, which are helped by social insurance and unions.
- Companies, government, and workers share the necessary costs of remaining competitive in global economy.

- Implicit coalition between capital and middle class in order to sustain jobs in the tradable industries.

### **Juan Gabriel Rodriguez: Is there a “Great Gatsby” effect?**

- Great Gatsby Curve:
- Alan Krueger has argued that countries with greater income inequality have less intergenerational mobility.
- Problems –
  - Small number of observations
  - Short interval of time (mid 80s to mid 90s)
  - Heterogeneous databases – reliability is called into question
  - Estimates for immobility are based on models
- Attempts to correct:
  - Use data from International Social Survey Program (1992, 1999, 2009)
  - Used 3 different years for 70 countries
  - Measure three different outputs – upward mobility, immobility, downward mobility
  - We used panel data and methods
- Gini is negatively correlated and significant for upward mobility regardless of what other variables are introduced.
- Inequality and economic performance affect each other.
- Inverted U shape: inequality improves performance up to a point, and then hurts performance.
- Problem with that: can’t say whether inequality is too high or too low.
- It may be better to distinguish between different sources of inequality.
  - Rent seeking? Bad for the economy.
  - Technological change? Inequality and growth ensue.
  - Individual effort may create inequality and is good for the economy.
  - Inequality of opportunity creates inequality but is bad for economic performance.
- Our analysis has show the last two points. (Marrero and Rodriguez, 2013).
- True in developed economies, but not in developing countries.
- Looking at the relationship between inequality and economic performance at various parts of the distribution yields ambiguous results.
- Some evidence that inequality of opportunity hurts income growth of the poor but not of the rich.
- Recent studies have found evidence for the Great Gatsby curve: a negative and significant effect of past inequality on upward labor status mobility
- And a robust positive and significant effect of past inequality on downward labor status mobility.

### **Jan Svejnar: Wealth Inequality:**



- We used Forbes magazine's data on billionaires over 20 years to investigate the link between inequality and growth.
  - How does presence of billionaires relate to growth by country?
  - Does it matter how wealth was generated (cronyism vs. entrepreneurship)
  - What matters wealth, income or poverty?
  - Wealth inequality vs. GDP, total capital, and population
- Used data from OECD and non-OECD countries.
- 5-year intervals over 20 years of data. So 4 observations.
- To look at cronyism looked at political connections of billionaires.
  - The index correlated with others - more political connected → more corruption as ranked by Transparency International's Corruption Perceptions Index.
- Wealth inequality correlates negatively with growth in subsequent periods.
- Negative effect driven by politically connected billionaires.
- Income inequality effect is weak.
- Initially income distribution matters and then not so much.
- Comparing results with Forbes – in first half of sample income inequality has a positive effect on growth but this disappears in second half of sample.
- Conclusions:
  - High levels of wealth inequality have negative consequences for growth whereas income inequality and poverty do not.
  - Politically generated wealth has an effect whereas unconnected wealth does not.

#### **Jody Heymann Inequality and Growth UCLA Fielding School Public Health**

- How do we test mechanisms of inequality?
- Productivity – around investments in human capital.
  - Investments in children 0-5
  - Education
  - Health
- But if we are going to test this – first thing we need to do is measure policy, then measure policy in a lot of countries, then measure it over time.
- We need to measure **policy** quantitatively and we have not done that, over time.
- At the World Policy Analysis Center – we measure social and economic policies in countries.
- Now we have constructed multilevel longitudinal models.
- 193 countries, with 1200 policy indicators merged unto household survey data.
- For 50 countries they have multiple points in time.
- Sample Indicators:
  - Protections for the elderly
  - Paid sick leave
  - Getting sick means that workers may lose jobs: increases inequality
  - Maternity leave
- Some facts:
  - 170 countries in the world provide paid sick leave, except the US.
    - Getting sick is one of biggest causes of poverty.

- Health raises productivity, global consensus.
- US – no constitutional mention of health.
- 187 countries have paid leave for mothers and infants. The US does not.
  - Paid leave shows productivity gains for parents and for kids.
  - It's mostly provided through social insurance so it is provided to informal economy.
- Teacher training for secondary school teachers is higher in most countries than in the US.
- Propose 2 things:
  - First thing: we should deepen understanding of mechanisms that inequality effects growth, but we should also look at what works.
  - This is rigorous research.
  - Second thing: we have to change dramatically the public dialogue.
  - Who do we have to reach beyond the expert community?
  - The range of people who think inequality is a big problem is from 40%-70%?
  -

### **Sanjay Reddy: India**

- The Lorenz curve for India today is in almost the same place today as 1991.
- There is concern with mismeasurement – especially at the top.
- There are inequalities between urban and rural and professions.
- But the Lorenz curve has not moved. So how do we reconcile?
- The top end in the better performing states is coming closer to the bottom end of the states that had previously done well.
- Over the medium and long term you do have Pareto dominance, although you have increases in some parts that are higher than others.
- So from that point of view growth is working.
- Anecdotal evidence suggests growth its not working.
  - There are Maoist rebellion
  - There are land battles
  - Most billionaires are wealthy through natural resources
  - Primitive accumulation is taking place
  - Governance structures and processes are weak
  - Huge corruption and money skimmed off the top in government projects
- The solutions will have to do with good governance.
- There are some ways the India growth story is compromised by inequality.
- Supply side problems:
  - Shortage of skilled labor – even in IT call centers - so companies moving to the Philippines.
  - Infrastructure development has been high profile but not necessarily the critical less glamorous rural roads.
  - Indian state has been characterized by being business friendly but not market friendly.

**Discussion:**

- Question for Nora: what about Chile?
- Question for Kalle. You described a social contract where capitalists are allowed to get a lot of money with the assumption that they will save and invest. But yesterday we saw the story of the financial sector facilitating consumption not investment in the US. Is that spreading to Scandinavia?
- For Jody, how do the maps take into account informal sector and would it make other countries look worse?
- Africa is a unique story where growth has been based on extraction.

**Ferreira:**

- Enormous heterogeneity in growth story in Africa. Some growth from natural resource countries – a lot more growth from natural resources countries. But also some from non-resource rich countries.
- Every sector growing in absolute terms, but manufacturing and agriculture growing very little.
  - Agriculture growth is pro-poor, but there is little growth.
  - Manufacturing is not pro-poor, but there is little growth.
  - Service growth is pro-poor and there is a lot of growth.

**Heymann:**

- Labor market discrepancies may be different in informal market, but a lot of policies are through the labor market (infant care etc).
- Who do these policies cover? When you compare similar countries, the laws make a big difference.
- If you compare at low and middle income settings, still better off to have the law on the books.
- The laws matter.
- The other myth is that this is solved by extended families.

**Lustig:**

- The outlier in Latin America is Colombia and Guatemala.
- Chile is not an outlier, it starts with high inequality but it is moving in the same direction.

**Session VII: Policy Outlook and Research Priorities**

**Chair: Danny Leipziger**

**Robert Triest, Janet Gorick, Heather Boushey, Roland Benabou, and Arjun Jayadev**

**Robert Triest:** Inequality of Opportunity and Aggregate Economic Performance

- Focused on inequality of economic opportunity.
- In the literature the relationship between inequality of outcomes and growth is inconclusive.
- But there is a clear theoretical prediction that inequality of opportunity constrains growth – and the limited empirical evidence suggests that is true.
- Ferreira and Rodriguez have two papers that measure outcomes and growth.
  - Measure inequality of opportunity by parent education etc
  - The residual –can be described as luck, effort or all else
- Rodriguez looks at the US by states
  - Opportunity is measured by father’s race and education. Conclusion are race and father education are bad for growth – “effort et all” good for growth.
- Ferreira looks at cross-country data with 2-5 indices. No firm conclusion.
- Our paper –
  - Use data on 741 US commuting zones.
  - We measure absolute mobility – income rank at age 30 of children whose parents were at 25<sup>th</sup> percentile while children.
- What is relationship between absolutely mobility and growth?
- Distinct positive relationship between absolutely mobility and per capita income.
- Relative mobility positive relationship.
- Absolute mobility in both period (2000-2010 and 2007-2012) is significant.
- Some endogeneity issues similar to what Krugman warned against.
- But take in conjunction with other findings –Rodriguez for example – you are getting the same story.
- Channels?
- Credit market imperfections
  - Unequal access to collateral and insider networks
  - Unequal opportunities for risk diversification
  - Lack of information about investment opportunities - i.e. – private colleges
- Missing markets for job matching and human capital – i.e. –job networks
- Parents
- Unequal access to education and professions
- Unequal human capital investment may hurt society in which market is embedded
- Policies can reverse these trends.

- Programs to improve nutrition, health and preschool
- Programs to complement primary and secondary education
- Better-targeted financial aid programs and outreach
- Better opportunities for adult education and degree completion
- Redistributive policies on efficiency grounds
- Ease of unionization in industries with high rents
- Policies that promote apprenticeship programs
- Regulations and incentives for companies to reduce worker turnover and career ladders for low-education workers through learning by doing.
- Paper: Hsieh etc “the allocation of talent and US”
  - Relaxation of barriers to entry for women and blacks responsible for 15-20% in growth in output for worker.

### **Janet Gorick:**

- We commissioned papers for a book ‘Income Inequality – economic disparities and the middle class in affluent countries’.
- The book is not about growth – but the literature suggests the middle is such a huge part of growth and a channel for growth.
- Economists stress the role of a large middle class on democracy and growth.
- Three things to point out
  - Measurement issues
  - Descriptive findings
  - Politics
- What do we mean by the middle class?
- Sociologists use multi-dimensional approach, but economists look usually at income distributions.
- Multi-dimensional
  - If you look at the middle 60% - the income share for the middle fell.
  - But by using the middle 60%, you don’t allow the middle class to shrink or grow. So then set bands around median.
  - What happened to size of middle band?
  - In 10 different countries, when the size of the middle fell, most of it moved upward.
  - Lane Kenworthy suggests looking at the growth of income of 25%, 50%, 75% - see shift toward higher growth at higher levels.
- Why do we care about middle class? What resonates?
  - In some countries, inequality has limited income growth of the middle class.
  - US, Canada, and Germany, but not in UK, Netherlands and Finland.
  - 16 – 24 year olds in the US are falling behind counterparts in other industrialized countries in literacy, numeracy, and technology skills.
  - American companies pay less in the US than counterparts in other nations.
  - Executives earn higher incomes in the US, while minimum wage is lower.

- As measured by the Gini coefficient, US is more unequal both before and after taxes than other OECD countries.
- Inequality per se doesn't have traction, but the exploding 1% seems to capture more attention. So does the hollowing or threatened middle.
- One conservative response: the left keeps talking about the weakening middle but that is not true. The middle is experiencing income growth. We can see size of middle declining, and income share declining, but the absolute income still growing.

### **Heather Boushey:**

- A big reason we are here is because of where we are politically.
- Despite sluggish recovery for most Americans there has been no improvement.
- American electorate doesn't know what to do about it.
- Regardless of our belief that inequality is critical and also critical for growth, we have more work to do.
  - Some questions:
    - Should we try to change the conversation on GDP for policymakers?
    - Reminder from Paul Krugman that we should not be too greedy about making inequality points.
    - I would propose focusing on trends in inequality and economic growth and stability as a way to frame a research and policy agenda to inform that debate.
    - We have an opportunity to reframe the narrative in the next two years.
    - We need a message about channels through which inequality affects economy.
    - Crisp stories to tell policymakers, research that will get us to compelling stories.
      - The profession finds this literature inconclusive.
      - This can't be the battle of the economists.
      - What kind of research is going to get us to compelling stories.
    - One message to highlight that comes from the Hseih study – it is the opening up of professions to women and minorities has been a major contributor to productivity and GDP.
- Some ideas for clarifying the story:
  - Take advantage of presidential debate.
  - While we got a republican congress, ballot initiatives did well – minimum wage passed in 4 states where Republicans were elected. We have 3 states with paid sick leave.
  - Menzi chin – Wisconsin vs. Minnesota found the Minnesota progressive policies improved growth.
  - Elevate case studies

- The question we're asking is what makes the economy grow and we have an opportunity to have some compelling stories to tell.
- What positive stories we can tell about inequality and growth? Use the GLEE TV show ethos.

### **Roland Benabou: Inequality and Performance Theory**

- In the 90s and early 2000s, active literature on growth and inequality.
- Imperfect capital markets particularly for financing human capital leads to idea that tomorrow's wealth depends on today.
- Redistribution reduces future inequality and may increase social mobility.
- Classical economics: equity-efficiency tradeoff, with growth-reducing redistribution imposed by median voter.
- Observed: higher inequality leads to less redistribution.
  - Perhaps initially more distributive.
  - But that changes over time that the more inequality the less redistribution.
  - The 1% takes over politics.
- More equal states have more redistribution (there is a U shape).
- More unequal states are less mobile.
- More spatially segregated cities are more unequal in opportunity.
- History matters, initial distribution of income sets path-dependence.
- Beliefs matter: "effort and willpower versus luck and social circumstances" as determinants of outcomes.
- Missing from rational political economy accounts theory:
  - Cannot attribute lack of support for policies to rational interests.
  - Reactions to redistribution depend on what people think causes initial inequality.
  - Beliefs may be completely out of line with social mobility.
- Douglas North: participants in economic systems develop ideology that rationalizes the economic structure and explains its poor performance, resulting in policies that reinforce existing incentives and organizations.
- You have to bring in behavioral economics or psychology.
- Supply side propaganda is one argument – but the media is not right wing.
- Demand side – people tend to rationalize their own world.
- Ideology is shaped by material world and then continues to shape material world.
- Countries where belief that luck is determinant of inequality are more redistributive.
- Higher inequality shapes views to perpetuate higher inequality.
- We need more work on the determinants of these attitudes and how they change.
- High pay – rents or rewards: our new paper will argue it is both.
- The higher you go in wages structure the more performance pay.
- There is evidence that this is a response to increased competition for talent
- We know short-term rewards can be harmful and so do firms, why do they do it?

- Ends up being a screening device that firms lose control of.
- At low levels of competition, firms offer too little incentives and extract rents.
- At high levels of competition, they offer high incentives that are socially not beneficial.
- Compensation is hump-shaped.
- Space for bonus caps, but may lead to other distortions.
- Argument for progressive taxation.
- Future research: externalities and competition among different firms

### **Arjun Jayadev: Guard labor and inequality**

- Unequal societies devote large resources to protection of property rights.
- Inequality key to necessary guard labor. Strong correlation.
- There is an enforcement-equality trade off.
- That is, societies that share their resources more equally enjoy levels of greater social and political legitimacy and may not require spending large resources on protecting the status quo distribution of property rights.
- We present evidence across countries, across US states, across cities.
- Correlation between high levels of conflict, low legitimacy.
- One way to measure this is the amount of labor devoted to “guard labor”.
  - You can include police – or legal etc
  - We use protective service workers (private guards) and test against inequality
- You see a connection between countries, states, and cities.
- Although strong link, no causality.
- Are there welfare implications?
  - Do guards count as addition to GDP or subtraction to GDP?
  - Long debate – but implication is as people move from production jobs to defensive expenditures then it is not a highly productive economy but same GDP.

### **Discussion:**

- In response to Roland: we do find more redistribution with more inequality.
- Arjun touched on all the dysfunctional behavior societies produce with extreme inequality – and these could have important effects on economic performance.
- Market for soccer coaches in Europe functions similarly to CEO pay in US.
- In terms of Arjun’s paper, rich segregate themselves and opt out of public services.
- **Stiglitz:** Performance pay loophole created in the early Clinton administration by Rob Rubin. But even then Stiglitz had research showing it wasn’t based on performance but rather on rent seeking.

### **Benabou:**



- First step in behavioral agenda on beliefs is what causes distortion. Second is how it spreads.
- For CEOs, it becomes bad for efficiency when it distorts the structure for pay – a multi-task model.

### **Wrapping Up and Next Steps:**

#### **Danny Leipziger:**

- Take Krugman's admonition to heart. We are talking to like-minded people and we need to separate normative judgments from what is useful.
- When we think about transfers in developing countries we think of them as investments in children. But in the US we consider these to be consumption goods – as Jared Bernstein mentioned
- We haven't proved here that inequality is bad for macro-performance. It's hard to imagine that consumption won't change and that the top shouldn't worry if 80% don't have disposable income
- The developing world has lots of lessons to offer. The debate is not new in the developing world. In World Bank, we have lessons on this.
- This is much more than a US problem. 50% of the gains have gone to the global 5%.

#### **Jan Svejnar:**

- Conference rich in providing stylized facts
- Middle class incomes stagnating
- Questions around MPC for rich vs. poor
- Unemployment above NAIRU 70% of the time after 1980, 30% before
- Then there were issues around measurement
- Gini vs. Palma
- Methodological issues around endogeneity of variables, theoretical perspective is useful
- Diversity of results
- Some fairly robust findings
- Surprising findings from Latin America for example
- We need to worry about or think about different types of inequality beyond just income or Gini

#### **Joseph Stiglitz:**

- How confident can we be about the relationship between inequality and economic performance? One option is to focus on undermining the alternative. Similar to minimum wage, studies discredited conventional wisdom that minimum wages would hurt poor and growth. If there is one goal, we find that the Okun view is clearly wrong.

- The story Nora told about inequality improving in Latin America offers a potential for lessons learned. Are those transferable? Scandinavia has managed to avoid the drastic consequences of US – are there lessons there?
- There is valuable work for theoretical frameworks to understand what is going on – mentioned by Roland and Adair. Starting from the point that markets have failures, private returns will not reflect social returns.
- We could look at natural experiments, but at the bottom line it's about policies. Those are the natural experiments we want to try.
- There are different narratives. The right has incentives, investment, hard work, etc. There is an alternative narrative about opportunity, rents, etc.
- Many of the phenomena we're looking at have multiple causes. Growth and instability are affected by numerous things of which inequality is one. Even the channels – there are many reasons people get in debt and inequality is one.
- Finally, among the short run stories, performance is one. If people don't have incomes its very hard to spend. If you don't believe that then you don't believe in modern macroeconomics.