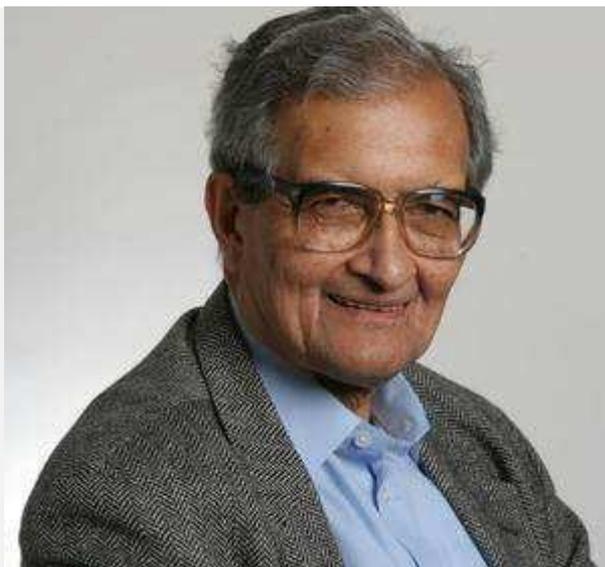# An Alternative Economic Paradigm: How Redistribution would Drive the Economy

Mar 25 2013 Skrivet av Piero Benazzo

Nobel Prize Amartya Sen

Amartya Sen (1981) provides evidence that increased income for a portion of the economic players may inflate the subsistence sector. In 1943, a famine in Bengal brought millions of citizens to their tragic deaths. Data show, however, that overall agriculture crops and farming yielded the same output as the previous years and were even higher in some cases. The question therefore is how could there have been such a famine? Sen's analysis explains this as a result of increased economic entitlements among certain segments of the population. The demand in the food subsistence sector increased. Given that supply in the previous years was quite tight to ensure subsistence, a market shortage occurred and prices for basic foodstuff more than tripled.

The segment of the population that earned the same previous nominal income, which had previously just managed to make a subsistence living, after inflation, found itself unable to secure sufficient food during the year. Had the increase in entitlements been widespread, due to the inelasticity of supply, inflation would have eroded the increase in nominal income, bringing back the entitlements to a comparable starting point. The citizens would have secured sufficient food during the year. Inequality together with the inelasticity of supply led to an increase of entitlements for some citizens that generated inflation in the subsistence sector and decreased entitlements for others. Extending this empirical evidence, an increase in inequality, as occurred in the last decades (Milanovic, 2009, Milanovic, 2011, Atkinson, Saez and Piketty, 2011, Saez, 2012), would lead to distortions that impede those price adjustments that according to neoclassical economics would re-establish "effective demand."

"Effective demand" is how economics refers to the demand that actually occurs, even if it could potentially be larger. Inequality would disrupt effective demand and growth. Such distortive dynamics would be well hidden behind current aggregates of statistical variables, otherwise they would have already been empirically proved. An alternative economic paradigm considers how to analyse such hidden dynamics.

Two sectors are considered, a subsistence sector and a wealth sector (somehow recalling Bhaduri, 2003). The wealth sector is defined as a sector where gains achieved beyond subsistence are circulated through consumption and savings that end up in investments to increase the production of goods and services while providing a standard of living beyond mere subsistence. The subsistence sector provides for housing, food, clothes and basic health care at a minimum level, taking into account relative individual needs, such as different perception of cold, type and minimum quantity of food, etc. Apart for these differences, this sector is considered to ensure subsistence for all equally. Wealth accumulated beyond subsistence may allow one to choose very elaborate clothing, attend very special and possibly expensive restaurants, and live in very large and special houses. These surpluses are considered part of the wealth sector. The current gloomy prospects and downturns in the real estate market show that there may be cases in which a previous standard of living beyond mere subsistence, together with long-term contractual arrangements and the impossibility to sustain or the unwillingness to avert losses may transform a surplus, which could normally be relinquished, into a necessity. Mortgages on expensive houses then become for example a forced need as long as a crisis is ongoing, i.e. in the real estate market, draining income that could be spent in the wealth sector.

Given a levelled equality in the subsistence sector, inequality may occur as such only in the wealth sector (Milanovic (2007, 2011) investigates in such direction with the concept of extraction ratio).

If an amount of money divided among one hundred families allows them to buy overall one hundred computers, it is quite unlikely that the same amount of money owned by one only family would push that family to buy more than fifteen computers. In other words, the marginal utility of consumption (of adding one more unit on top) decreases, such that for a same amount of cumulative income perceived by a comparable number of persons in two regions of the same country, the demand would be higher for the group where the income is more evenly distributed, in comparison with the group where the income is more concentrated. Economic theories and models often forcibly overlook such realistic assumptions, such as in the case of the benefit-cost analysis (Zerbe, 2006, Benazzo, 2010b). One might eventually consider the case of two regions, one in which wealth above subsistence is completely levelled while in the other all wealth above subsistence is completely owned by only one person. Received distributed incomes are lower in this second case. This clearly has a dramatic effect on effective demand such that in the perfectly levelled region effective demand in the wealth sector is at a maximum while in the maximum inequality region effective demand is near zero. The analysis is here on consumers, i.e. the demand side of the economy. To facilitate the argument, the producers' efforts to improve profits, i.e. the supply side, are initially disregarded. To do this, it is assumed that the level of technology, organisational efficiency and human capital know-how (i.e. total factor productivity) are fixed without improvement. The discussion will introduce further down the positive effects of progress in total factor productivity on effective demand.

When authentic inequality is defined as inequality in the wealth sector, this is always greater than inequality averaged in the whole economy. The greater the weight of the egalitarian subsistence sector in the economy considered, the greater the difference of inequality measured in the wealth sector compared to its measurement in the overall economy. Normal statistical data and inequality indicators referred to the whole economy, rather than only to the wealth sector, would underestimate actual inequality differences and would shuffle the inequality rankings. This, and in particular the shuffling, would hide actual dynamics.

The separation between the subsistence and wealth sectors makes it possible to integrate Sen's empirical analysis in an alternative economic paradigm discussed in these pages. The focus of the analysis remains a few more paragraphs on the demand side (consumption) by holding fixed the total factor productivity (technology, organisational efficiency and human capital know how), the two regions illustrated above would have two different dynamics in the wealth and subsistence sectors.

Analysis is facilitated by simulating a law that obliges entrepreneurs and their stakeholders (markedly affluent in the more unequal region) to produce and to sell only in one of the two regions. Entrepreneurs in both regions would prefer to produce in the more unequal region, where labour costs are lower, while they would prefer selling in the more equal region, where effective demand is greater. Entrepreneurs who are obliged to invest in production in the more levelled region would pressure the government of that region to allow cutting wages and other labour costs, with the other related typical dynamics. As entrepreneurs would invest in the more unequal region, the more levelled region would lose jobs. If migration is allowed, eventually citizens would migrate from the least to the more unequal region (or would accept wages cuts in order to remain in the former).

Since the two regions are analysed as providing a different level of internal effective demand in relation to their level of inequality, because of decreasing marginal utility of consumption and different dynamics in the two mentioned sectors, the end result of the flows would be that the average inequality in the two regions combined increases. Competition alone, without social contracts to redistribute wealth would thus tend to increase inequality. Effective demand from the demand side in the combined aggregate of both regions would thus decrease.

With a given situation of total factor productivity (technology, organisational efficiency and human capital know-how) in the supply side, the market outlook is determined by the demand side. When the above dynamic increases inequality in both regions combined, the wealth sector market outlook deteriorates, while demand in the subsistence sector holds, since it is driven by the need to allow subsistence. Therefore prices tend to deflate in the wealth sector compared to the subsistence sector. As long as there is a difference in level between the two regions, entrepreneurs in the more level region may delocalise towards the more unequal region, where lower labour costs (i.e. wages, etc.) lead to deflating prices and enhance competitiveness.

Forgetting for a moment the considerations above on Sen's dynamic, while still holding fixed technology, organisational efficiency and human capital know-how, delocalization towards the region with lower labour costs deflates prices of production. This increases purchasing power from the supply side. Such gains may be used in two alternative directions or in a combination of the two:

1. nominal labour costs in the more levelled region are left unaltered, such that distributed real purchasing power increases, providing the means for a distributed improved standard of living
2. nominal labour costs in the more levelled region are decreased, leaving distributed real purchasing power constant (representing constant standard of living)

Usually neither of the two would occur, since Sen's dynamic would be in place and would generate a third alternative, which is combined with the two above.

3. Nominal labour costs for most citizens remain constant, while purchasing power increases (1). In addition, the affluent who have a stake in entrepreneurship would establish plants in the more unequal region and earn more than in the past. Inequality in the more levelled region increases. Sen's dynamic (3) due to the increased inequality would augment the weight of the subsistence sector in the economy, thus decrease purchasing power in the wealth sector. This would neutralise dynamic (1). The purchasing power in the wealth sector would thus remain constant as in case (2), even if nominal labour costs are kept constant as in case (1) while prices in the supply side decrease.
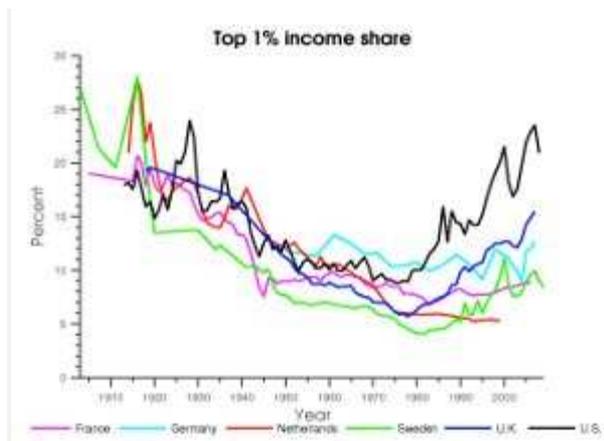
Data from Anthony Atkinson Thomas Piketty and Emmanuel Saez

Thus the majority of citizens in the levelled region would feel as if the economic situation were unchanged because their real purchasing power remains constant, while the affluent increase their wealth significantly, thus increasing inequality and multiplying Sen's effect.

In this analysis, prices adjust by means of inflation or deflation, in the neoclassical sense, without any particular consequence on effective demand. What would influence effective demand would be the differential dynamic of price inflation and deflation in the two sectors.

Does an increase in total factor productivity counterbalance such inequality dynamic? It uses fewer Earth and human resources to produce, thus decreasing costs. This may yield more profits and gains for its stakeholders (i.e. shareholders, and top management staff, and others), or it may decrease prices and thus increase the distributed purchasing power (or a combination of the two). The first dynamic would increase inequality; the second would tend to decrease it. Wherever this increased supply side generated income goes, it increases purchasing power and effective demand from the supply side. In view of the discussion above, the first option increasing inequality relative to the second one would imply a lower

effective demand from the demand side. In case of low effective demand from the demand side, i.e. due to excessive inequality, Neoclassical economics would still interpret this as generated from the supply side. The dynamic is then quite straight forward: insufficient demand draws down prices, lower prices increase demand thus production increases. This also decreases excessive inequality as a by-product. A hybrid of the neoclassical paradigm combined with thle alternative paradigm adds a positive dynamic to such arguments: a decrease in inequality would tend to activate the positive side of Sen's dynamic thus increase effective demand from the demand side and would multiply the effect. However, the full alternative paradigm would tell another story, a more detrimental one: without social contracts to counterbalance inequality generated by competition, Sen's effect of different price dynamics in the two sectors would generate a trap that would keep increasing inequality, even if prices in the markets are decreased, such that effective demand from the demand side keeps decreasing. Such a trap would eventually prevail over effective demand generated from the supply side.

A description of this trap runs as follows. Decreasing marginal utility of consumption for the affluent that benefit from the additional surplus created by increased total factor productivity growth pushes them to increase savings, and to place those savings in investments. From the supply side, these would create additional employment, thus increasing effective demand. Such increases in total factor productivity growth would reinstate effective demand from the supply side counterbalancing effective demand lost from the demand side due to inequality increase. An increasing total factor productivity growth would allow the affluent to gradually concentrate more and more wealth in their hands. With Sen's dynamic, the subsistence sector would gradually inflate. The wealth sector would gradually nominally deflate in comparison to the subsistence sector. Concurrently, total factor productivity growth would keep the real purchasing power of the majority stable (dynamic (3) above), without decreasing the quantity and quality of goods bought in each sector. To maintain this situation, the pace of total factor productivity growth needs to accelerate. At a certain point, the wealth sector would shrink so much in comparison to the subsistence sector that it would become quite sensitive to changes in the pace of total factor productivity growth. When further acceleration of total factor productivity growth becomes unfeasible, the decrease in effective demand from the demand side becomes larger than its increase from the supply side. Given the relative inflation of the subsistence sector and gloomy perspectives in the wealth sector, the affluent would start moving their savings from investments in the wealth sector to placements in the subsistence sector. Food, clothes and basic health care may become quite safe compared to other sectors although the stock market downturn may also hit those companies shareholders. In the long run, the real estate market starts giving relatively higher expected returns. The savings tend to be redirected to that sector. This further inflates the subsistence sector, starting a negative self-feeding cycle of inflation in the subsistence sector, draining the wealth sector and decreasing its effective demand. When this cycle sets in, if the policies to resolve the crisis tend to decrease labour costs in order to increase exports, then the inequality increase would tend to inflate further the subsistence sector keeping it as a relatively safe investment or an investment were the losses outlook is less significant than investing in the wealth sector. This would further decrease internal demand. Policies could try to counterbalance this with exports. Exports are determined by the internal demand (i.e. imports) of other countries. If the majority of the economies set themselves on such a path of maximizing exports at the expense of internal demand, the world economy would decrease effective demand.

The case of the two regions in a same country illustrates the case of delocalization from a place where labour costs are higher to one where they are lower.

Further considerations may be made in an open economy when the two regions considered are located in two different countries, one with higher inequality, lower labour costs, with possibly less technology, organisational efficiency and human capital know-how available to increase total factor productivity growth. The other less unequal region would provide a larger market where to sell. If production using technology, organisational efficiency and human capital know-how may be delocalised, the dynamic described above may have more margin to manoeuvre, however its nature is the same. Additional considerations need to be made concerning how the exchange rates work. In the long run, however, it would be impossible to isolate the regions with different currencies, as long as there are free movements of goods and capital. Thus, the dynamics would be those described above for two regions in the same country. Delocalization would allow productivity to grow faster than without delocalization. This allows decreasing prices thus further prolonging sales in a shrinking nominal wealth sector market (relative to the subsistence sector) without decreasing the quantity of goods previously sold. The process of ending up with a downturn would be delayed, although eventually it would occur due to the dynamics just described.

In addition to this, interactions may be looked at from the stock market perspective. When inequality increases, as the net present value of future cash flows relative to investments in the wealth sector decrease, stock evaluations tend to decrease. Concurrently, because of the same inequality increase, the affluent have more and more savings to invest. They would invest them more and more in the stock market, which tends to increase the stock market valuation. The effect of these excess savings would more than counterbalance the former effect and provide a positive net increase in valuation that would hide the fundamentals, i.e. the gloomy outlook of future cash flows (Benazzo, 2009). A bubble would build up. When the bubble starts being perceived and the gloomy outlook averted, investors would slowly start diverting their savings from the stock market to the real estate market. Economic players invest in real estate, by enlarging their homes and by buying more than one house when possible. This would tend to further inflate the subsistence sector by feeding into the negative spiral mentioned above. Effective demand and the outlook of the wealth sector would further decline.
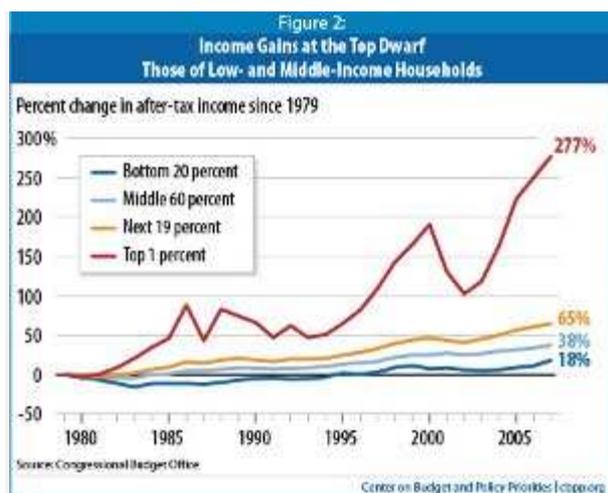
U.S. income; Center on Budget and Policy Priorities Source Congressional Budget Office

These dynamics, if left on their own, set off a self-feeding negative cycle, bringing on recession, great recession and then great depression.

Such dynamics would currently remain hidden behind statistical data that combine the above mentioned different aspects in aggregate values (Benazzo, 2009, 2010a). The combination of the subsistence sector with the wealth sector in one aggregate would hide the differentials of inflation in the two sectors, and of the effective demand in the each sector. When production is delocalised to another region, then there is decoupling of the area where effective demand is generated from the demand side, from the area where effective demand is generated from the supply side. Comparing two regions without controlling this decoupling would tend to hide a correlation between inequality and effective demand. This would lead two countries having the same inequality, but in two different degrees of delocalization, to show two different effective demands. In general, without differentiating effective demand generated from the demand side with respect to that generated from the supply side, the aggregation would hide different dynamics with respect to the two sides of the economy. In addition to the difficulty of accounting for inequality on the demand side, measurements of total factor productivity on the supply side are very elusive. Leaving these dynamics unaccounted for would impede showing a clear relationship between inequality and effective demand.

An increase in inequality would generate a negative multiplier, thus the reverse, an decrease of inequality, would have a positive multiplier effect. It would generate lower inflation in the subsistence sector, and restore demand in the wealth sector, generating additional real purchasing power in a virtuous cycle.

In the alternative paradigm, the dynamic of inequality on the demand side, constitutes a key to understanding the usual policy options. For example, for a given fixed total factor productivity, the following options may be interpreted this way:

1. Wages are increased in order to provide more purchasing power to the labour force. This would decrease inequality, as it would decrease the gains of those who have stakes in the companies gains in favour of the middle class that can buy products. In terms of internal demand, companies stakeholders could try to maintain the previous profits level by increasing prices and generating inflation (neoclassical economics argues in a similar way that higher wages are eroded by inflation in the medium and long-term). Inflation would impact low-income earners more than the affluent, bringing back a large part of the previous inequality, thus mostly neutralising the initial positive effects on the internal demand. Increased prices would decrease exports. The decrease in exports could be larger than the increase in internal demand, with a net negative balance.

2. A decrease in prices would provide more purchasing power to consumers. This would increase exports. In order to decrease prices, entrepreneurs would find ways to decrease costs, including the cost of labour. This would increase inequality. This in turn would decrease effective demand by the mentioned dynamics, rather than increasing it, contrary to what was intended initially. If the majority of countries follow this policy, exports increase little as they depend on other countries' internal demand. So the increase in exports would be lower than the decrease of internal demand, with a net negative balance.

3. A decrease in taxes would provide more purchasing power directly in the consumers' hands.

   Public services for the middle-class (moderately wealthy) and the poor are financed to a great extent by a tax redistribution from the wealthy. An overall tax decrease would

decrease redistribution and increase inequality, thus decreasing effective demand by the mentioned dynamics, contrary to what was intended initially.

4. An increase in government expenditures would generate the famous Keynesian multiplier, whereby economic output would increase more than the public expenditure incurred. The alternative paradigm implies that this multiplier would only function when public expenditure decreases inequality. The Keynesian multiplier is normally studied without checking when it is applied by decreasing or increasing inequalities. This would give mixed signals that would be interpreted as an absence of a Keynesian multiplier. In addition, this would hide the alternative paradigm negative effect of inequality on effective demand. Such negative correlation would always generate a demand side multiplier when inequality is decreased. The Keynesian multiplier would be a special case of such alternative paradigm multiplier, as it would only work when public expenditure decreases inequalities.
5. An increase of redistribution, i.e. through progressive taxation, would decrease inequality. If there were side effects, they would fall in the cases examined above. These would normally be of a lesser magnitude than the direct effects from a decrease in inequality. These would reverse the above-discussed recessive dynamics, and could be engineered in order to keep prices low to allow exports.

Since such multiplier would depend on inequality, policies for reinstating effective demand could be set through redistribution without necessarily involving a large state to intervene with large government programs (Roemer, 2010). A certain degree of inequality keeps incentives in place and remunerates those who increase production efficiency. This spurs the private sector to be competitive, providing incentives to increase total factor productivity, while tending to concentrate wealth. The public sector can formulate redistributive policies by implementing social contracts. The Scandinavian countries have a culture that strives to enhance total factor productivity, including in the public sector, and that attempts to settle market price dynamics wherever possible. In addition, inequality is kept low compared to many other countries, through redistribution. Such countries invest significantly in research and development and provide policies for enhancing total factor productivity growth (Andersen et al., 2007). Thus they couple low inequality, enhancing effective demand from the demand side, with high total factor productivity thus enhancing effective demand from the supply side. The good performance of the Scandinavian countries would thus be due to a coupling of these two factors. Policymaking would need to strive for enhancing both.

Within the current mainstream culture and paradigm, for politicians to get reelected they need to promise that they will cut taxes, which increases inequality and create or exacerbate recession. However noble the intentions of political and economic players and electors, they would need to take the courage to increase taxation of the rich in order to reinstate long-term effective demand in the interest of all, rich included. Society would face new challenges. Is there any chance that it would stand up to them? Hopeful optimism is expressed.

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References

Andersen, Torben M., Bengt Holmström, Seppo Honkapohja, Sixten Korkman, Hans Tson Söderström, Juhana Vartiainen, 2007. "The Nordic Model - Embracing globalization and sharing risks", The Research Institute of the Finnish Economy (ETLA), Helsinki: Taloustieto Oy

Atkinson, Tony, Emmanuel Saez and Thomas Piketty, 2011. "Top Incomes in the Long Run of History", Journal of Economic Literature, 49(1), 2011, 3-71

Bhaduri, Amit, 2003. "Structural Change and Economic Development: on the Relative Roles of Effective Demand and the Price Mechanism in a 'Dual' Economy", in "Rethinking Development Economics," edited by Ha-Joon Chang (Antherm Press).

Benazzo, Piero, 2009. "Confounding in the Interaction of the Global Financial Crisis with the Real Sector," in Günaydin, Íhsan and Hilmi Erdoğan Yayla, 2010, "What Others Manifest? The World Economy in the Theoretical Turbulence of Global Financial Crisis," Gümüşhane University Press, Gümüşhane, Turkey, http://icibe.gumushane.edu.tr/belgeler/papers.pdf

Benazzo, Piero, 2010a. "Unravelling the World Crisis: Redistribution versus Public Expenditure", Working paper, www.ssrn.com/abstract=1519811.

Benazzo, Piero, 2010b. "Equity Criteria as Instrument to Ensure Sustainability of Pareto or Kaldor-Hicks Efficiency: A correlation hidden by confounding as key for sorting out the Global Economic Crisis", in "Economics and Management", Faculty of Economics and Management, Kaunas University of Technology, 2010, http://internet.ktu.lt/en/science/journals/journals.html

Milanovic, Branko, Peter H. Lindert, Jeffrey G. Williamson, 2007. "Measuring Ancient Inequality" National Bureau of Economic Research Working Paper Series, No. 13550, October 2007

Milanovic, Branko, 2009. "Global Inequality Recalculated: The Effect of New 2005 PPP Estimates on Global Inequality". World Bank Policy Research Working Paper Series, 5061, Available at SSRN: http://ssrn.com/abstract=1478814

Milanovic, Branko, 2011. "A short history of global inequality: The past two centuries", Explorations in Economic History, Volume 48, Issue 4, Pages 494-506

Saez, Immanuel, 2012. "Economic Inequality Teach In", UC Berkeley, laborcenter.berkeley.edu/events/teach_in, http://www.youtube.com/watch?v=1nCCGnUtf9I

Roemer, John E., 2010. "Thoughts on Socialism Seventy Years after Schumpeter", Homo oeconomicus, München : Accedo Verl.-Ges., Vol. 27.2010, 1/2, p. 9-23

Sen, Amartya K., 1981. "Poverty and Famines: An Essay on Entitlement and Deprivation" Oxford: Clarendon Press

Zerbe Jr., Richard O. and Bellas, Allen S. 2006. "A Primer for Benefit-Cost Analysis", Northampton, MA: Edward Elgar Publishing, Inc.

Graphs

Some graphs may be found at:

http://www.huffingtonpost.com/daron-acemoglu/us-inequality_b_1338118.html

http://www.cbpp.org/cms/index.cfm?fa=view&id=3629