Dynamic interregional risk-sharing: The challenges of the long-term perspective

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The prosperity of different countries and regions of the world is always extremely difficult to predict. In the early fifteen century, China was by far above all other countries in terms of scientific knowledge, economic development and welfare. Along the east African coast, Chinese flotillas far surpassed in grandeur the small Portuguese fleets that came later. In 1405, one of these Chinese fleets consisted in 317 vessels and carried 28,000 men. At that time, who could have predicted that 5 centuries later, China would be one of the poorest countries in the world, before a bright and impressive recovery, as witnessed these days? Maddison (1991)'s long-term time series on country-specific GDPs per capita provides fascinating illustrations of the often diverging sakes of different nations and their citizens. Small differences in the economic growth rates, if maintained in the long run, lead to huge differences in welfare.

The uncertainty faced by a community is nothing else than the sum of individual risks faced by its members. Citizenship is one of the main determinants of individual and family destiny. The mirage of the "American uncle" is reminiscent of the importance of joining the good "band" in the long run. Individual risks are huge over the lifetime. Because of risk aversion, they dramatically reduce welfare in the absence of solidarity, and they inhibit risk taking, innovation, and growth. One of the strengths of human kind has been to organize solidarity and risk sharing, first informally within families and rural communities, and more recently through myriad of market mechanisms and public institutions. These "insurance" systems have a huge positive impact on our citizens' well-being. As is well-known, markets are particularly inefficient to share risks associated to human capital, in particular due to asymmetric information (mostly moral hazard) and the difficulty for workers to commit. This is why governments in developed countries implemented a social security system, which induces them to play a key role to organize solidarity at the national level. Ex ante, the ability of States to organize compulsory transfers among their citizens has a deep beneficial impact on risk sharing efficiency, but is limited to the boundaries of these States.

Is the allocation of risks in our Society efficient? Jacques Drèze convincingly claims that we are far from such an allocation, and that the collapse of Belgium as a country could have a dramatic adverse effect if it is not compensated by a clever risk-sharing contract between Flanders and Wallonia. These two communities are affected by asymmetric macroeconomic shocks which may imply a large divergence in their destiny. These heterogeneous shocks have some predictable and persistent components in the short and medium run, but they have a more radical uncertain component for the distant future. This is why the regionalisation of the redistribution tools (social security, taxation,...) basically eliminates the interregional risk sharing mechanisms if it is not accompanied by a strong long-term commitment of the regions to put in place and maintain a new risk-sharing device among them.

Drèze's proposal is based on pure ex ante efficiency considerations, not on ex post redistributive arguments. This may be hard to understand for short-sighted analysts. For example, Drèze does not claim that because Flanders currently enjoys more prosperity than Wallonia, the first should compensate the other by a huge interregional subsidy. There may be a redistributive argument in favour of doing that, but this is clearly a different topic not covered by Drèze. Realized risks cannot be insured! Rather, he proposes that, considering the current heterogeneous economic environment of the two regions, and given the potential growth expectations within each region and the long term uncertainty surrounding them, one establishes a new constitutional amendment that would commit the two parties to financially compensate the one whose observed relative growth falls below its expectation. Thus, the potentially diminishing expectation in one region is not an efficiency argument for the other one to compensate it in the future; only a redistributive argument may justify this. Rather, it is risk-sharing efficient that the later compensates the former only if its relative economic performance becomes even worse than this expectation. If wealthier regions are often suspicious about this scheme, this is because of the classical mixing up of redistributive and risk sharing mechanisms. Under Drèze's proposal, all regions participating to the scheme are made better off ex ante!

In spite of the huge gains of this proposed constitutional contract, its prospect of success is bleak.[16] Let me review the list of the challenges raised by this proposal.

First and above all, there is a huge commitment problem. Shocks on growth have a strong persistent component. One needs a particularly strong central authority, as in the United States or Germany to oppose opportunistic regional behaviours in the states of nature in which one region is in a situation to contribute a lot to the prosperity of the other regions, and is likely to do so for a long period of time in the future. It is a matter of fact that we are not anymore in such a situation in Belgium. Therefore, the envisioned interregional risk sharing scheme needs to be constrained by a self-enforcing condition: in all future states of nature, all parties must prefer to fulfil their commitment rather than to secede, thereby giving up the benefits of risk sharing in the future. Since Coate and Ravaillon (1993), there has been an important literature on this risk sharing problem in the absence of commitment.[17] Of course, this risk of secession in the future reduces the social gains of the scheme, but it makes it more realistic. The renegotiation-proof best risk sharing arrangement has a memory, and it resets the benchmark on which future conditional transfers are determined when one of the participating region is on the verge of seceding.

Financial innovation can be instrumental in providing tools to alleviate the commitment problem. Drèze proposes that the regions emit long term debt contracts indexed on the regional GDP per capita. Conditional to each region allocating their risks efficiently within their own boundaries, this is indeed the perfect instrument to shape an efficient risk sharing arrangement across the different regions. By exchanging these regional debt contracts at the desirable level, all citizens will benefit from the increased prosperity of the wining regions – and they will bear their share of the diminishing prosperity of the others – independent of where they live. The initial prices of these assets may be heterogeneous to reflect expected regional growth differentials. This excellent idea should of course not be limited to Belgium, and in fact has been promoted by the author in the context of establishing a new deal between developing and developed countries. Apparently, this financial innovation has not been put in place before, except in a few countries, in which the success was limited. There is a "lemon" problem associated to emitting bonds indexed on GDP.[18] Only countries with the lowest expectations on growth will be willing to emit them, which implies that the market for such asset breaks down. In the current equilibrium, any country or region which would emit such bond would signal its bad type. Only a coordinated move by several countries or regions could defy these equilibrium beliefs on financial markets.

Moral hazard is a standard argument against risk sharing. Different regions can resist to the idea to share risk among them if they believe that this will reduce the incentive of each of them to promote growth. Fighting moral hazard requires to limit either the degree of risk

[16] It's a trademark of Jacques Drèze to endorse visionary challenges. When I was his graduate student at CORE in the mid eighties, he was one of the leading scientific proponents of a single currency in Europe, at a time when such an idea was not really taken seriously. He also invested a lot of time and energy in favour of establishing stronger solidarity arrangements with developing countries.

[17] See Laczo (2009) for a review of this literature.

[18] I am indebted to Jacques Delpla for mentioning this point.

sharing, or the degree of each member's freedom to choose its destiny. In other words, it is a complex matter to disentangle risk sharing from subsidiarity. However, recent experimental studies at the frontier between economics and psychology demonstrate that intrinsic motivations may inhibit moral hazard. Whether or not communities can develop such intrinsic incentives remains an open question at this stage.

Finally, we must recognize that beliefs about the various regions' potential to grow are heterogeneous, in particular for the distant future. It implies that the fairness of a given allocation of risk is subject to multiple evaluations. When risks are shared, each region has a strategic interest ex ante to maximize its reported growth potential in order to benefit from the insurance coverage when such benchmark growth fails to materialize. It is therefore crucial to rely on a really independent institution to establish a consensus growth scenario for the different regions participating to the mutual pool.

Some of our colleagues will claim that this is an utopian project, and that the two communities in Belgium are too far apart to establish such an efficient risk-sharing scheme. Sharing risk in the absence of a powerful supervisor requires reciprocal esteem and trust, clearly two scarce resources in Belgium. It is a noble mission for economists to explain to the politicians and to the citizens what should be done, and what would be lost if the proposed solution would not be implemented.

I fully endorse Jacques Drèze's proposal.

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