Lead Piece

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On the interaction between subsidiarity and interpersonal solidarity

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1. *Subsidiarity versus solidarity*

Belgium faces today the challenge of re-thinking the extent and contents of **regionalisation.**

Many authoritative voices have been heard over the recent past, stressing the potential benefits of "**subsidiarity**" achievable through more decentralisation, that is through transfers to the regional level of responsibilities or programs currently vested at the federal level. A frequently heard illustration is: active employment policies should be targeted towards the low-skilled in Wallonie, towards older workers in Vlaanderen. More regionalisation should permit:

- adapting *policies*, region by region, to local situations and objectives;
- providing better focused *incentives* to local agents and decision-makers.

At the same time, equally authoritative voices have stressed the desirability of preserving "**interpersonal solidarity**" among all Belgians. That goal is presented as deserving precedence over the pursuit of more efficiency through decentralisation. To illustrate: the goal is alleged to rule out regionalisation of social security.

Whereas subsidiarity pleads for confederalism, solidarity pleads for stronger federal ties. There thus arises a **potential conflict** between the two preoccupations.

I do not wish to express personal views on the validity of specific claims, like those listed for illustration. Such claims must be **documented empirically**, case by case. I have not engaged in such empirical research.

Instead, I wish to discuss the **interaction between subsidiarity and solidarity**, relying in particular on the economic theory of **efficient risk-sharing**, an area where I feel more at home. This approach permits some clarification of the conditions under which the conflict can be tempered.

2. *Static versus dynamic solidarity*

In everyday language, solidarity means "mutual assistance". I shall distinguish a **static** dimension of solidarity and a **dynamic** dimension.

To illustrate, **imagine** that **public pensions** were regionalised in Belgium, with preservation of the individual entitlements corresponding to past contributions. This would entail a transfer, from the federal to the regional level, of responsibility for the public pensions of beneficiaries currently retired, and for the share of the public pensions of future beneficiaries corresponding to past contributions.[1] Since that responsibility is currently vested with the

[1] I note in passing that, by analogy with international practice, such responsibility should be inherited by the region of employment, not of residence; also, the former is ambiguous when a person works in a region different from that where the firm's headquarters are located. That distinction helps explain why no *stock* estimates of regional pension entitlements are currently available in Belgium. Regionalisation would call for a *definition* of regional responsibilities. Such a definition should include provisions for dealing with future mobility.

federal authorities, its transfer should be accompanied by a transfer of resources from the federal to the regional authorities, in an amount equal to the present value of the responsibilities inherited by the regions.[2] From then on, each region defines freely the regime of public pensions applicable within its jurisdiction, collects the associated contributions, and meets the resulting obligations. Individual pensions evolve as the sum of entitlements linked to prior contributions plus entitlements under the new regional regime.

The evolution over time of the net financial balance of the regime in a given region will reflect the ratio of contributions to benefits, as influenced by various factors: the overall economic activity, the average working life and life after retirement, a.s.o. The evolution of these factors is subject to uncertainty. Dynamic solidarity concerns the mutualisation of the risks associated with that evolution, which needs not be identical in different regions.

There is thus a clear distinction here between static solidarity – the level of initial transfers – and dynamic solidarity – the mutualisation of future risks.

I shall not be concerned here with "static" aspects. Clearly, decentralization calls for a suitable definition of initial conditions, "static solidarity" provides the natural criterion for defining these,[3] and no specific issue of reconciling subsidiarity with solidarity arises. The situation is different with respect to dynamic solidarity, which concerns specific arrangements regarding **future risk-sharing. That is the level at which an issue of interaction between subsidiarity and solidarity arises.**

It is crucial to recognise at once that organising future risk-sharing is a matter of **efficiency, not redistribution.** The issue of "fairness" under regionalisation is entirely contained in the static definition of initial conditions. If the future were devoid of uncertainties, its path would be defined fully by the initial conditions. Under uncertainty (the realistic case), dynamic solidarity invites arrangements that cope efficiently with future risks, neither more nor less. If future transfers between regions are organised, they should aim for **ex ante efficient sharing of future risks.** That is why, and where, an economic theory of efficient risk-sharing comes into play.

3. *Efficient sharing of economic risks*

Efficient sharing of economic risks[4] among the members of a given population calls for two conditions:

(3.a) **all** the risks borne by **all** the members of the population should be merged into a single pool, then shared among **all** these members – so that nobody bears any risk that is not shared with everybody else ("**mutuality principle**");

(3.b) the pooled risks should be shared among **all** individual members of the population on the basis of their respective risk-tolerances ("**sensitivity principle**").[5]

"Risk tolerance" is a technical economic concept; it is the reciprocal of "risk-aversion", as measured by the maximum insurance premium a person would be willing to pay for covering a given risk. Risk aversion is subjective and personal, but widely held to be diminishing with wealth. Efficient sharing thus typically concentrates risks on wealthier citizens; but **this is not redistributive ex ante** –and may result in either more, or less inequality ex post (the balance is indeterminate).

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2 That present value is well-defined on re-insurance markets.
3 The natural starting point here is the equality of rights and duties of all citizens prior to decentralization; see Drèze (1993) for an illustration.
4 That is, risks susceptible of a monetary measure (which includes risks to life!).
See Drèze (2000, section 2) for explicitation. In general, bearing risks entails a risk premium, which appears as a fixed term in the final allocation.

4. *Tiered implementation*

The principles of efficient risk-sharing are amenable to **tiered implementation**. Consider a population spread over the N regions of a given country. An efficient sharing of the economic risks borne by the population of the country could be implemented in two stages:

(**4.a**) each region pools the risks of its own members;

(**4.b**) the **global** risks of the N regions are then pooled, and **shared among the regions on the basis of their aggregate risk tolerances**;[6]

(**4.c**) **each region organises the sharing among its own members** of the region's share of aggregate country risks, as emerging from (**4.b**).[7]

This very useful property must be understood properly. It states that *any efficient* sharing of the country risks *can be* implemented in *either one or two stages*, with the same final outcome for every citizen! When *efficient* sharing is defined *uniquely* (e.g. under constant individual risk tolerances), the final outcome is indeed *always the same* under one or two stages. When there exist *multiple efficient allocations* (more general forms of risk tolerance), there is scope for *different outcomes* whenever different regions select different members of the efficient set[8]. This could result in different degrees of inequality across regions, reflecting different redistributive policies. Such an outcome may be regarded by some as a breach of interpersonal solidarity, by others as a natural implication of subsidiarity. (I side with the latter, while recognising the challenging nature of the issue.)

Under a two-tier arrangement, it would be natural to refer to step (**4.b**) as implementing "interregional solidarity"; and to step (**4.c**) as implementing "interpersonal solidarity".[9] Under such an arrangement, **no conflict arises between subsidiarity and solidarity** – at the current level of abstraction.

But implementing (**4.a**)-(**4.c**) is easier said than done, as illustrated next with reference to the current situation in the EU. Under a more realistic specification, conflicts between subsidiarity and solidarity reappear, and will be discussed further below (see section **7.**).

5. *A glimpse at the current record*

How close are European economies to efficient risk-sharing today? Four comments are in order.

(**5.a**) In the area of interpersonal solidarity, the EU is basically advocating the subsidiarity principle and the "open method of cooperation", without attempting to pool risks among member nations. Indeed, the EU total budget is voluntarily restricted to some 1.3% of incomes (national, on average, or aggregate). Thus de la Fuente et al. (2008, p. 4) estimate that "for a representative European citizen, the net effect of the EU budget is equivalent to a flat tax of 1.75% on the difference between his income and the EU average". **Step (4.b) above is altogether missing, in the EU!** And progress on that front remains hampered by the unanimity rule… In contrast, the extent of redistribution across member states has been estimated to 20% in the US and 40% in Canada.

6 The aggregate risk-tolerance of a group is the sum of individual risk-tolerances.
7 This tiered implementation of risk-sharing corresponds to the wide-spread practice of *reinsurance* whereby insurance companies redistribute their respective *aggregate risks*.
8 That selection allows for redistributive judgments.
9 Note also that tiered arrangements can be implemented over more than two tiers.

(5.b) Within member nations, there are substantial programs of mutual insurance, coming under the heading of "**social security**" (unemployment insurance, health insurance, pensions,..), or resulting from **progressive taxation of family incomes.** These separate programs come together under the national budgets, and this allows for some further pooling. Thus, in Belgium, there are national contributions to the separate branches of social security, beyond the "insurance premia" paid by affiliates (employers and employees); these contributions amount to about one third of the aggregate resources of our social security; see Fasquelle et al. (2008).[10]

(5.c) Within EU member nations, social security and income taxation result in **interregional net transfers,** to the effect that the ratio of average disposable income to average primary income varies across regions. In Belgium, the ratios are 0,98 for Flanders, 1,01 for Brussels and 1,05 for Wallonia. Extreme values of such ratios are 0,97 vs 1,16 for the old and new Länders of Germany, 0,93 vs 1,05 for Dutch regions, 0,93 vs 1,05 for British regions; see Table 11.3 in Meunier et al. (2007).

(5.d) **Capital markets** do not contribute much to risk-sharing, because assets traded on financial markets represent (capitalise) a small share of national incomes: 7% in the US, less elsewhere. There are hardly any assets representative of aggregate incomes in a country or set of countries.

6. *Sharing regional risks: scope and time perspective*

In the framework of a Belgian constitutional reform, there is scope for **preserving solidarity through mutual sharing of global regional risks,** as per **(4.b)** above, while **allowing subsidiarity** to implement **(4.c)**. In this spirit, the Belgian reform could also be seen as an opportunity to **show Europe the way towards more efficient risk-sharing at the EU level:** retain the advantages of subsidiarity, but introduce more global risk-sharing across member states!

The feature of **sharing global regional risks** implies that what is at stake, ultimately, is **interregional solidarity, not interpersonal solidarity.** This is an important clarification of terminology, relative to the current debate.

What is to be understood here by "global regional risks"? The natural answer is: risks affecting **real regional income per capita**. Even for adjoining regions, there is scope for idiosyncratic risks: the industrial specialisations differ between Flanders, Brussels and Wallony; so do the age and skill distributions in the population; natural catastrophies may hit one region but not the others; economic policies may evolve more efficiently in some region(s); a.s.o. All these risks have *global* relevance. To the extent that future contingencies remain both idiosyncratic and uncertain, there is scope for interregional risk sharing.

It is important to realise that benefits from such risk sharing accrue **in the long run.** Let me explain briefly. What is at stake is risk-sharing, not redistribution. Now, empirical estimations, in particular by Lucas (1987) and Gollier (2001), suggest that the risks due to short-run variability in growth rates are quite small; in contrast, the risks resulting from medium-to-long-run trends, as estimated by Forni and Reichlin (1999) for instance, are substantial. The reason for the contrast is straightforward: short-run risks can be largely absorbed through *intertemporal smoothing*; permanent risks cannot! Thus, what really matters is **sharing the risks surrounding long-run trends.** And that is difficult, because it implies a **long-run commitment!** (In the case of Flanders and Wallonia, willingness to engage in long-run risk-sharing is open to doubt … no?)[11]

[10] See also Hepp and von Hagen (2009) for a thorough exposition of the structure of transfers implemented in Germany before and after the 1999 unification.

[11] Whether or not both regions have benefited from sharing long-term risks along the history of Belgium since 1830 is controversial; see, e.g., Hannes (1995) vs Meunier et al. (2007).

The important conclusion here is that **a short-run arrangement is not worth the bother.** In absence of willingness to share long-run risks affecting regional incomes per capita, interregional solidarity is dead, and that is after all what many advocates of "interpersonal solidarity" are ultimately worried about.

7. *Two hurdles*

Regarding the specific merits and difficulties of implementing a two-tiered efficient sharing of long-run regional risks. Two issues stand out.

(7.**a**) The first issue concerns **public moral hazard.** Moral hazard arises, in the economic terminology, when insurance of a risk results in aggravation of the risk. In the field of social security, this danger is omnipresent *at the individual level*: unemployment benefits temper job search, overconsumption of medical care is a permanent threat, early retirement programs discourage labour force participation, a.s.o.. This danger at the *individual* level should not be affected by mutualisation of *aggregate* regional risks. But a more subtle danger lies in waiting, namely the danger of looser economic policies under interregional mutualisation; i.e., moral hazard *at the level of public policies*.

In a federal state, public moral hazard linked to regional policies[12] is open to *control* by federal authorities, whereby the hazard is tempered. The same opportunity does not exist *between* regions pursuing *independent* policies.

On the other hand, overall **incentives** towards efficient policies are apt to be enhanced by regionalisation, which brings the outcomes closer the decision makers.

Which of these two effects dominates is an open question, left to case-by-case empirical research!

(7.**b**) The second issue concerns **interregional externalities.** The public policies adopted in one country or region entail restrictions for the feasible sets of adjoining countries or regions, when individuals or firms or capital are geographically mobile. This feature is widely recognised at the European level. Thus, tax heavens limit the prospects for property income taxation elsewhere; low labour taxes in some countries entail a risk of social dumping all around; corporate or inheritance taxes in neighbouring areas limit the scope for domestic taxes; a.s.o. When policies are defined at the federal level, these effects are internalised, resulting in measures that either are uniform (no externalities) or take externalities into account. Coping with externalities is thus amenable to *direct control* under federalism

But uniformity entails the implicit cost of foregoing subsidiarity, and policies geared to externalities entail the direct costs of administrative complexity – as confirmed by the Belgian experience. **Contractual agreements** offer an alternative, potentially superior route for internalising externalities.

Which way the balance of these arguments lies is an open question, left to case-by-case empirical research.

8. *Implementing interregional risk-sharing*

(8.**a**) Any program of interregional risk-sharing would start with the **definition of global regional risks.** If two regions wish to pool their aggregate risks, they should first agree on their

[12] For instance, in Belgium, it is in the interest of regions to qualify beneficiaries of social aid (a regional outlay) for unemployment benefits (a federal outlay).

respective **expected paths of real regional income per capita.**[13] The two regions may start from different **levels** of income per capita; that is **immaterial** from the viewpoint of risk-sharing. What matters instead is the **uncertainties surrounding these expectations.** If region A grows faster *than expected*, whereas region B does not, then A should share with B an agreed share of the **difference** between realisation and expectation; and conversely if B grows faster than expected, whereas A does not. The relevant paths here are **long run paths,** for reasons explained under **6.** above.

It is thus important to assess carefully the reference, expected paths. On this, **agreement** is essential – even if not easy… Still, the long-run perspective is an advantage, in that respect. Thus, the expected long-run per capita growth rates of Flanders and Wallonia are probably comparable - say of the order of 2% par year, reflecting productivity growth. Short-run expectations may stand farther apart. And the long-run uncertainties are apt to be partly correlated, thus reducing both the gains from mutual insurance and the size of the transfers implementing it.

Regarding the sharing rule, the principle is to start from the respective (aggregate) risk-tolerances of the two regions, and to allocate the **differences** between realisations and expectations on the basis of these. (The transfers have zero expected value by definition, so unequal shares are immaterial.) Again, average risk-tolerances for Flanders en Wallonia are apt to prove reasonably comparable.

(**8.b**) A practical approach to sharing long-run risks might be to **exchange debt instruments** indexed on deviations from expectations of the growth rates of real regional income per capita. A very long-run would call for perpetuities. Debt instruments with a 20 or 30 years maturity would go a long way.

Because such instruments are uncommon, a precision is in order.[14] Consider an exchange of instruments between Flanders and Wallonia, meant to transfer from Flanders to Wallonia 1/3rd of the deviation from expectation (positive or negative) of aggregate Flemish disposable incomes against a transfer from Wallonia to Flanders of 2/3rd of the corresponding Walloon deviation. To that end, both regions issue debt instruments and donate them to the other region. In order to make the debt instruments freely negotiable, it should be the case that they entail *rights, and no obligations*, for the holders. To that end, the debt issued by each region should give right to a coupon equal to: (i) *the net difference* between the amount that region should collect and the amount it should deliver, *whenever that difference is positive*; (ii) *zero otherwise*. Accordingly, the instrument received by either region entails the same yield as if the two separate transfers had taken place. But that instrument has become negotiable. And this is essential to make default equivalent to reneging on the regional debt, a move with severe consequences that neither region will adopt. With that definition, it is also clear that both regions will wish to entrust the evaluation of the transfers to a reliable third party, an independent party that potential holders of the debt instruments will trust (like OECD?).

9. *Partial implementation*

Having recognised the demands of implementing long-run interregional solidarity, one wonders whether there is scope for organising a second-best form of dynamic solidarity **at the level of specific programs,** in particular social security programs.[15]

To illustrate, let me consider first the global social security system for salaried workers (SSSW), i.e. unemployment, health and pensions. Consider a regionalisation scheme under

[13] The precisions "real" and "per capita" are important, for obvious reasons.

[14] This paragraph was not present in the preliminary version of the present document, as circulated to the discussants. I apologise for the initial omission of an important precision.

[15] I could also mention schemes of *partial insurance* that have second-best merits under moral hazard. On that topic, I refer readers to Appendix A of Drèze (1993).

which an extreme form of confederalism leads to regionalise *all* federal means and responsibilities, *except* for SSSW. Only the latter remains a federal responsibility. It was noted under **5.b** above that, under current Belgian practice, two thirds of the social security resources come from contributions by employers and employees, and one third comes from other federal revenue. If that situation is expected to prevail in the future, the proposed scheme would call for one third of SSSW outlays to be covered by *regional contributions*. How should the respective contributions of the different regions be assessed?

It follows from the general principles outlined above that such assessment should implement efficient interregional risk-sharing! Thus, **the path outlined under 8. stands unchanged,** and one could just as well regionalise SSSW along with the rest. The only – significant – difference is that the **extent of interregional risk-sharing** would be reduced to the scope of SSSW, thus entailing less extensive transfers.

The same reasoning would apply if one wished to regionalise SSSW alone, while keeping the current federal structure unchanged. As stated above, the basic issue lies with **interregional, not individual solidarity.** These remarks suggest the following

Proposition: In order for any form of regionalisation entailing potential transfers of public resources to be ex ante efficient, it should be accompanied with some mutual insurance of the risks affecting real regional incomes per capita in the long run.

That is, the need for organised interregional risk-sharing pervades all forms of regionalisation – while preserving the compatibility of subsidiarity with solidarity. (Of course, that compatibility remains subject to coping with the hurdles mentioned under **7.** above, and to the possibility of organising a long-run commitment, as exemplified under **8.b.**)

10. ***In conclusion***, let me stress the main points of this note.

Reconciling subsidiarity with solidarity:

- concerns efficient sharing of long-run uncertainties between regions, hence
- concerns interregional rather than interpersonal solidarity, and
- concerns risk-sharing, not redistribution; but
- requires a long-run commitment immune from reneging;
- can be implemented by combining extensive regionalisation of responsibilities with a form of mutual insurance of risks affecting real regional per capita incomes in the long run;
- raises an issue of public moral hazard:
- calls for coordination (along lines not discussed here) of regional programs, so as to internalise cross-regional externalities;
- could be implemented at the level of specific programs, which would still call for mutual insurance of aggregate regional risks;
- could show the way towards more efficient risk-sharing at the EU level.

These conclusions suggest that **extensive subsidiarity remains potentially compatible with extensive solidarity**. Of course, these conclusions should not be understood as recommending maximal regionalisation of responsibilities in the framework of Belgium's constitutional reform. **My purpose is simply to clarify some basic issues, not to voice recommendations** beyond the natural one of exploring further the many issues raised here!

REFERENCES

de la Fuente, A., R. Domenech and V. Rant (2008), "Addressing the *Net Balances* Problem as a Prerequisite for EU Budget Reform: a proposal", *Documento de Trabajo* D-2008-04, Direccion General de Presupuestos, Ministerio de Economia y Hacienda, Madrid.

Drèze, J.H. (1993), "Regions of Europe", *Economic Policy*, Oct., 266-307.

Drèze, J.H. (2000), "Economic and Social Security in the 21-st Century, with attention to Europe", *Scandinavian Journal of Economics*, 102(3), 327-48.

Fasquelle, N., M.-J. Festjens, M. Saintrain, B. Scholtus and S. Weemaes (2008), "Le financement à long terme de la sécurité sociale et ses consequences sur les finances du pouvoir federal", WP 24-08, Bureau Fédéral du Plan, Bruxelles.

Forni, M. and L. Reichlin (1999), "Risk and Potential Insurance in Europe", *European Economic Review*, 43(7), 1237-56.

Gollier, C. (2001), *The Economics of Risk and Time*, MIT Press, Cambridge.

Hannes, J. (1995),"Mag er een ietsje meer zijn? Vlaanderen en de Fiscus 1830-1914", *Liberaal reflex*, 4/95, 5-12.

Hepp, R. and J. von Hagen (2009), "Fiscal Federalism in Germany: stabilization and redistribution before and after unification", DP 7246, CEPR, London.

Lucas, R. (1987), *Models of Business Cycles*, Blackwell, Oxford.

Meunier, O., M. Mignolet and M-E. Mulquin (2007), "Les Transferts Interrégionaux en Belgique", *Cahier de Recherche 19*, CERPE, Namur.