BACKGROUND PAPER

Going beyond fiscal equalisation: institutional and fiscal tools to fight territorial inequalities

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Going beyond fiscal equalisation: institutional and fiscal tools to fight territorial inequalities[1]

1. Fundamental design issues for fiscal equalisation systems

Fiscal equalisation typically aims to allow SNGs to provide a comparable level of fundamental public services according to their needs and differences in fiscal capacity.

1. Following recent work on fiscal equalisation published by the Network on Fiscal Relations across Levels of Government, the Fiscal Network and the Centre for Entrepreneurship, SMEs, Regions and Cities jointly organised a workshop on 22 March 2022. This Room Document summarises the main questions and points raised by the experts who took part on it. These included Professors Philip McCann (University of Sheffield Management School), Enid Slack (University of Toronto), Lars-Erik Borge (Norwegian University of Science and Technology), Andrew Reschovsky (University of Wisconsin-Madison), Diego Martinez-Lopez (Universidad Pablo de Olavide), Willem Sas (Stirling University) and Paul Smoke (New York University). The first section addresses key general issues for future reform of FE systems, building on previous work gathered in the recent publication *Fiscal Federalism 2022: Making Decentralisation Work* (OECD, 2021[1]), while the second section will look into a more unexplored area regarding the link between fiscal equalisation, territorial disparities and regional policy.

2. Fiscal equalisation (FE) systems, which first emerged during the 1940s and 1950s, are today present in most federal and decentralised OECD member countries. There are a wide variety of fiscal equalisation models. Most can be classified depending on whether they equalise fiscal capacity or expenditure needs, or combine both; whether they are funded by vertical or horizontal grants; and on whether they pursue a full or partial equalisation goal. However, many combine multiple features and some issues are relevant to all systems.[2]

3. Although there is a straightforward funding sufficiency goal behind FE systems, since they aim to provide SNGs with enough revenue so as to provide a minimum level of public services to citizens that live within their jurisdictions, there is an equity and efficiency rationale for FE as well. In addition to a shared

[1] This document is based on the proceedings of the joint Fiscal Network–Regional Development Policy Committee informal workshop "Going Beyond Fiscal Equalisation: Institutional and fiscal tools to fight territorial inequalities", which took place on 22 March 2022. The summary was drafted by Andoni Montes Nebreda (Fiscal Network), with inputs from Sean Dougherty (Fiscal Network), Antti Moisio and Miquel Vidal-Bover (CFE).

[2] For a full discussion on OECD fiscal equalisation systems, please refer to Dougherty and Forman (2021[16]).

objective, grant unconditionality is also an intrinsic characteristic common to all FE models. Precisely, expenditure autonomy is required to take advantage of SNGs' better position to deliver public services adapted to regional and local preferences and needs.

4. Both recent crises, the Global Financial Crisis in 2008-09 and COVID-19 pandemic in 2020-21, produced a large fiscal shock in public budgets, and this includes SNGs'. These crises also increased intergovernmental and territorial disparities, as not all levels of government, regions nor municipalities, for instance, have been affected in the same ways (OECD, 2021[2]). The need for *ad hoc* responses by central governments to absorb the impact of the collapse in tax revenues and the sharp increases in expenditure, particularly in healthcare, suggests that actual FE schemes may not be as flexible and resilient as they could ideally be (OECD, 2021[1]).

5. In addition, recourse to *ad hoc* mechanisms usually means larger discretion than predefined formula-based transfers. This does not help to attain simpler, more transparent, predictable, fair, equitable, efficient and effective FE models, which are desirable characteristics, based on previous analysis.

1.1. COVID-induced structural changes in fiscal capacity

6. In light of the COVID-19 pandemic short-term shock to public finances, almost half of governments expected the funds for FE to fall post-pandemic. Moreover, Professor Andrew Reschovsky argued that the pandemic's long-term impact could reach FE through structural changes in fiscal capacity, as opposed to expenditure needs, whose impact was concentrated in the short-term.

7. Although the extent of remote work in certain OECD countries has nearly returned to pre-pandemic levels (on average), the experts deemed this phenomenon one of the key structural changes that could alter SNGs' fiscal capacity (OECD, 2021[3]). Its potential consequences for subnational revenue are two-fold:

- *Decline in commuting*: a reduction in office-days would decrease demand for public transportation by commuters, with an impact on revenue from user-fees. Even if most metropolitan public transportation systems are provided by regional and local governments, this phenomenon would asymmetrically affect large cities, since user-fees are not equalised, and thus it would not impact fiscal equalisation transfers. Yet this does not mean that SNG's budgets are unaffected since in some instances *ad hoc* transfers were paid out by CGs during the 2020-21 period to compensate for the collapse of this kind of revenue.
- *Residence changes*: in the longer-term, remote working could allow for high-skilled workers to leave cities. While the evidence so far is limited to the largest cities in selected OECD countries, this may alter their fiscal capacity from residence-based taxation. This could affect revenue sources from personal income taxes, which are often partially decentralised (OECD, 2021[1]). If regions with broad personal income tax bases lose in favour of wins for territories with lower fiscal capacity, this would mean that equalising fiscal capacities will become less costly.

8. At the local level, lowered demand for office space and housing in large metropolitan areas will induce moderation in prices, with negative consequences for property tax revenues, as could be happening since 2020 in selected cities such as Chicago, New York and Seattle, according to Professor Andrew Reschovsky. Precisely, property taxes, following prescriptions of Musgrave's tax power allocation across levels of government (Martinez-Vazquez and Sepulveda, 2012[4]), are among the main revenue sources of local governments.

1.2. The extent of fiscal equalisation

1.2.1. Equalisation degree. Is total equalisation a myth?

9. One of the most frequent debates regarding fiscal equalisation is how extensive it should be. Multiple questions on this issue were raised during the workshop. There is no clear evidence on whether optimal equalisation should be total or partial, and experience shows that total equalisation does not occur. In fact, even FE models that nominally pursue total equalisation objectives or that follow legal mandates to do so, do not equalise all fiscal capacity, nor all expenditure needs. There are several pathways through which total FE is not achieved, in rough order of importance:

- *Equalisation ceilings*: limits the amount of funds devoted to FE (e.g. the Canadian regional FE system is completely funded by vertical transfers paid by the federal government. In order to limit the financial impact on federal budget of its FE scheme, since 2009 it applies an expenditure ceiling updated every year according to GDP growth rates).
- *Revenue retention rates*: a share of tax capacity is not equalised and part of revenue raised by SNGs is retained by them (e.g. Spain applies a 25% retention rate for regional fiscal capacity, meaning that only three-quarters of regions' fiscal capacity is equalised).
- *Excluded revenue sources*: overall, only tax revenue is equalised. This leaves non-tax revenue (e.g. user fees) out. In addition, some formulas exclude or provide a special treatment to natural resource tax bases, such as in the case in Canada.
- *Excluded expenditure areas*: not considered part of "basic" or "fundamental" public services. This often excludes policy areas such as culture or environmental policy, which offer great opportunities for containing the urban-rural divide as will be discussed in the second section.
- *Excluded jurisdictions*: there are several reasons why FE systems can cover only some jurisdictions. On the one hand, when FE is fully funded by vertical grants, SNGs that do not qualify to receive FE transfer allocations are automatically excluded from the scheme. This is the case for Canadian provincial FE system, but also for large cities in the six local FE schemes that exist in the country (in some provinces, only small and remote towns are considered) (Bird and Slack, 2021[5]). On the other hand, asymmetric decentralisation could result in the coexistence of different funding schemes within the same country, or even regions (e.g. in Spain, the so-called *foral* regions, Basque Country and Navarra, do not take part in the general FE scheme).

1.2.2. Fiscal capacity. Should non-tax revenue be equalised?

10. As mentioned above, current fiscal capacity formulas only take into consideration tax revenue or bases. Moreover, often only certain tax bases are used. In the face of an increasing relevance for public budgets of other income categories, such as user-fees or patrimonial public income, there are opposing views on whether these kinds of public income sources should be equalised.

11. Those who oppose argue that it would eventually lead to equalising all public income. In addition, due to technical limitations to calculate potential revenue from non-tax sources, it could be necessary to rely on actual revenue figures. The latter is not recommended since it may lead to incentives for a race to the bottom via tax competition. According to Professor Paul Smoke, this is particularly a problem in developing countries, where increasing tax autonomy usually means opening the door to SNGs to eliminate taxes (e.g. Indonesia). Although the opposite is often seen in OECD member countries, it can also take place, as with wealth taxation in Spain (Agrawal, Foremny and Martínez-Toledano, 2020[5]). Some degree of tax harmonisation could help address this issue. Furthermore, because non-tax revenue is less stable over time, tying FE to it could worsen the predictability of funding allocations for SNGs and damage their budgetary stability.

12. In contrast, experts calling for the inclusion of non-tax revenue in FE frameworks argue that the opposite would exclude an increasing share of public revenues. Along these lines, commitments to the international ecological transition agenda imply the need to foster public revenues from environmental revenue bases, suggesting that this issue is likely to gain salience, as the Canadian FE model illustrates (Snoddon and Tombe, 2019[6]).

13. In addition, the latter argue that it would distort SNGs' decisions regarding the implementation of environmental revenue-raising measures. For instance, excluding environmental non-tax revenue could incentivise net contributor SNGs to lobby for the adoption of alternative solutions to carbon taxes, such as Emission Trading Systems (ETS), to avoid equalisation, whereas to be net recipients, SNGs would follow the opposite incentive. Of course, except in FE asymmetric models, once institutions would opt for one of the alternative solutions, that would bind all jurisdictions, since it is tax bases and not actual revenues that are generally equalised, disregarding their specific choice for tax or non-tax solutions.

14. More broadly, the question arises as to why fiscal tools that pursue same objectives by different means should be treated differently by FE schemes. This discussion is not circumscribed to GHG emissions, but is common in other environmental policy areas. In some fields, such as congestion pricing, there exist tax and non-tax alternatives (e.g. tolls are user-fees, while vehicle owning taxes, payments per driven kilometre and flat-rate vignettes are considered taxes). However, in areas such as urban waste pricing, all commonly applied fiscal tools (e.g. pay-as-you-throw or lump-sum payments) are considered user-fees.

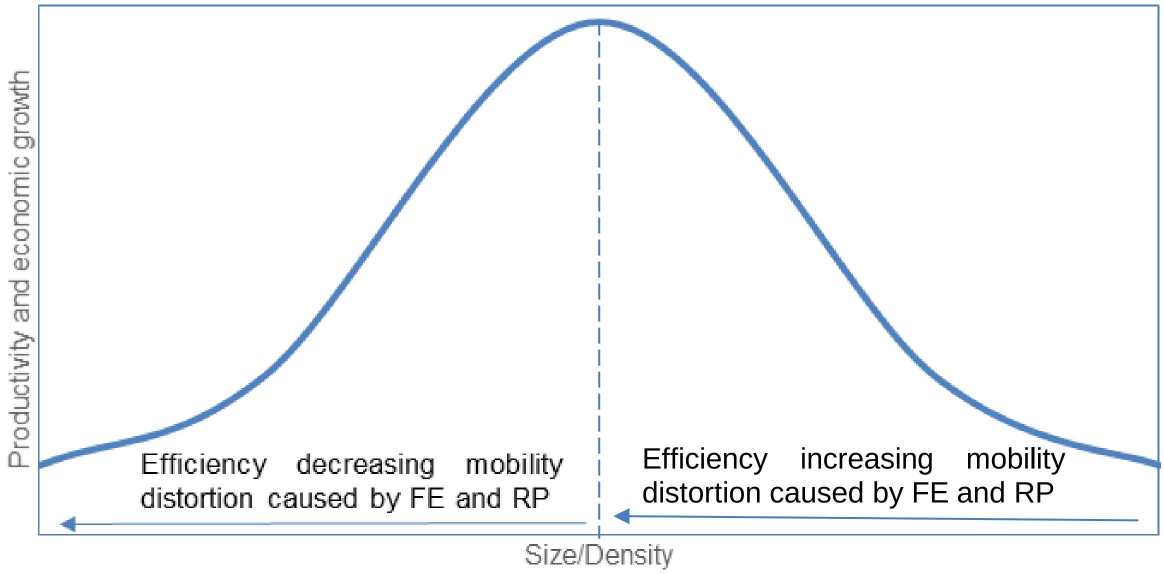
15. Finally, as previously discussed, non-equalisation of public transportation user-fees, generates the need for *ad hoc* compensation instruments in the face of extraordinary revenue decreases. If compensation is not well targeted or not enough, as pointed out by Professor Andrew Reschovsky for school-district extraordinary equalisation transfers in the US, it increases the risk of suboptimal public service under-provision, which would mainly harm lower-income groups.

1.2.3. Expenditure needs. Should cost differences be included in equalisation formulas?

16. As both fiscal equalisation and regional policy (RP) distort labour and capital factor mobility decisions, they play a role in determining the size and density of subnational jurisdictions. Economic literature supports positive effects of agglomerations for efficiency through increased productivity and growth through economies of scale, knowledge spillovers, cluster and network effects (Neumark and Simpson, 2014[7]). These may be among the determinants of capital regions' better performance when compared to less dense rural areas. Density is usually identified as a positive variable for lowering public service provisions costs too.

17. However, as recalled by Fiscal Network Chair Junghun Kim, while economies of scale and productivity increase with density, congestion costs do also. This means that when congestion costs exceed gains from scale – and thus the optimal density/size of jurisdictions is reached – efficiency losses are observed due to excessive density. This effect is known as diseconomies of scale, and is mainly caused by overly large congestion costs, and drive an inverted U-shaped curve (**Figure 1**). Experts taking part in the workshop suggested that the optimal density point could have been surpassed in some of the most crowded metropolitan areas, such as Seoul, Korea, where they have created a new capital city to address this issue. But how is it possible to identify where the optimal density is located?

Figure 1. The inverted-U shaped relationship between productivity and density



18. Figure 1 represents the hypothesis of the inverted U-shaped relationship between productivity and density. The impact of FE on density is not clear and depends on the weight each variable is given in the equalisation formula, the degree of equalisation chosen, and where on the inverted U-shape the jurisdiction is located. In general terms, since both FE and regional policy influence incentives for populations to locate in less dense jurisdictions, then if located on the right-hand side of the U-shape, they would be not only equity-increasing, but efficiency-increasing too. In the same scenario, *ceteris paribus*, total equalisation would be superior to partial equalisation as long as it would not move the position of the jurisdiction onto the left side of the inverted-U shape.

19. There is one particular exception to this general insight, which is cost equalisation within expenditure equalisation. As mentioned above, the main expenditure item faced by SNGs is labour cost of public employees that work in local public services provision. As wages and prices are usually higher in larger and more densely populated urban areas, cost equalisation could set incentives for SNGs to apply policies that foster this phenomenon in order to attract a larger allocation of transfers. If jurisdictions are located on the right side of the inverted-U shape, then this specific kind of equalisation would damage efficiency. Finally, there exists an exception within the exception. If local public service provision costs related to remoteness and low density are considered within the equalisation formula, then cost equalisation could put pressure towards lower density outcomes.

20. Apart from fiscal equalisation and regional policy, it is possible to find capital-city/regional contributions among the proposals made to break the trend towards larger urban-rural disparities. Capital regions and cities are already net contributors both to regional policy and fiscal equalisation. However, some argue that extra compensation is needed in order to cope the so-called market-led capital-region favouritism.

1.2.4. Coverage. Should all jurisdictions be homogeneously part of equalisation?

21. As listed before, there are a number of reasons why as well as examples of FE models that do not cover all jurisdictions. As suggested by Professor Enid Slack, without diminishing the importance of regional-level fiscal equalisation, more attention should be paid to local equalisation, which has so far received little scholarly attention.

22. There are several arguments in both directions, for and against full coverage of jurisdictions within FE schemes. On the one hand, asymmetric FE could be supported for economic reasons, as excluding broad tax base jurisdictions could help control the amount of vertical transfers needed to supply equalisation. When, in addition to vertical transfers, horizontal grants are involved, political and constitutional reasons can explain why these kinds of jurisdictions could be relieved from contributing to FE. The latter usually only takes places with relatively small jurisdictions, since negative consequences for territorial equity could arise.

23. Asymmetric FE schemes are more likely to emerge in local equalisation schemes. Because of their lower political salience within federal countries, creating different regimes for different types of municipalities gets less costly in political terms. In the US, Canada or foral territories in Spain, states, and provinces are in charge of designing local FE within their boundaries, respectively. Consequently, local FE design can largely diverge. In fact, in Canada only six provinces apply local FE, whereas the rest do not. Again, this opens the floor for larger asymmetries in entitlement and risk for higher horizontal inequities, since municipalities with the same fiscal capacity and/or expenditure needs would be treated differently depending on which jurisdiction they are located.

24. Among commonly used variables for jurisdiction triage across FE models it is possible to find size (population), development/per capita income levels, or even on whether they qualify as “touristic destinations” according to the share of housing represented by vacation homes. While the rationale behind the use of the former variables is particularly related to fiscal capacity, reference to the latter is justified by higher and seasonally-concentrated expenditure needs.

25. As within-country territorial inequalities increase, we could foresee a trend towards increasing asymmetries in FE schemes. However, its direction remains ambiguous since pressures in opposite directions can be expected. On the one hand, shrinking regions, as well as those less densely populated, are raising their voice to call for more accurate and explicit integration of their larger unitary cost of public service provision within FE formulas. In addition, some researchers call for internalisation of environmental inter-jurisdictional spillovers through compensatory grants for “ecological services” provided by rural areas to urban metropolitan areas (Ring, 2002[8]). The latter proposal would also improve incentives for SNGs to engage the international and national environmental agendas.

26. On the other hand, demographic change that has widened the urban-rural divide has also increased the financial effort required to equalise increased expenditure needs in rural areas (e.g. old-age care) and decreased urban fiscal capacities. This phenomenon is amplified when retired workers move back to small towns after they leave the labour market, as pointed out by Senior Advisor Sverker Lindblad. This increased need for redistribution across regions, and maybe across individuals too, could raise political tension, with cities asking for rural towns to be more efficient, although they may levy higher taxes than large cities, as is the case in Sweden. Tensions between net recipient and net contributors could be fostered regarding FE, but also regional policy, and even on territorialised CG expenditure (e.g. fiscal balances).

1.3. Going beyond fiscal equalisation: grant earmarking

27. As our Chair Junghun Kim explained, the European Charter, among other legal documents, awards priority to non-earmarked grants in order to preserve SNGs' expenditure autonomy, and self-government in general. Although this issue goes beyond the normal bounds of FE, since earmarked grants, by definition, cannot be part of fiscal equalisation models, we have included it due to its key relevance.

28. Should the grant unconditionality "dogma" be revised? As already explained, grant earmarking prevents SNGs to take advantage from some benefits of fiscal decentralisation. Consistent with the hypothesis of budget maximisation, and according to Professor Lars-Erik Borge, SNGs prefer unconditional transfers rather than earmarked grants, and thus FE over regional policy. Therefore, structural reforms changing the equilibrium between both kinds of instruments could be politically controversial.

29. As explained by Professor Paul Smoke, grant earmarking is particularly appealing to address problems arising from policy agenda misalignments across levels of government. For instance, when low institutional quality requires grants to be linked to specific outcome-achievement, conditional to carrying out specific reforms or providing certain public services. Alternatively, for instance, as an instrument to ensure SNGs engage with environmental agendas, which are set at the international and national levels but lack incentives for SNGs to seek attainment of committed goals. Finally, as raised by Senior Advisor Sverker Lindblad, earmarked grants might be of the appeal of CGs as a way to signal they support subnational governments, as FE transfers could be less visible for citizens.

30. How transfers are spent is of key importance for improving citizens' trust in institutions, according to Professor Phillip McCann. This was also mentioned by Professor Andrew Reschovsky in relation to the extraordinary fiscal transfers deployed during the pandemic in the US. However, the same argument also applies to Next Generation EU funds or to regular FE and regional policy financing. In this context, there may be room to make use of grant earmarking. However, independent fiscal institutions devoted to monitoring fiscal equalisation could be best suited to elaborate case-specific recommendations.

2. Fiscal equalisation and regional policy: together or separately?

Regional policy aims to close the gap in socioeconomic development levels across regions.

31. Connections between fiscal equalisation and regional policy remain still largely unexplored. Although there exist evident links, as will be shown in this section, little attention has been paid to them. Furthermore, it has often been the case that both tools were mixed up or not well distinguished. This is why an analysis on fiscal equalisation and regional policy should start by defining and identifying differences and similarities between these instruments.

2.1. Differences and similarities of fiscal equalisation and regional policy

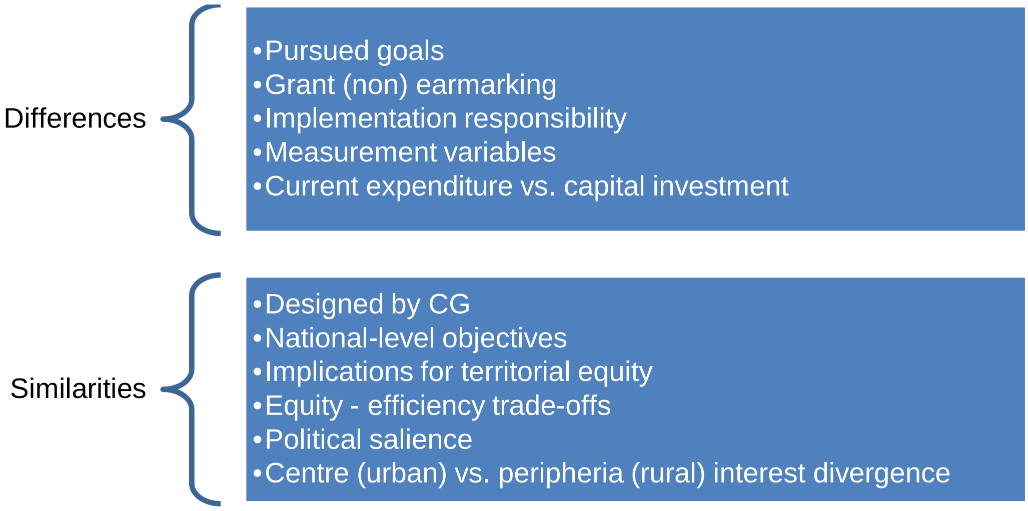
32. As previously explained, fiscal equalisation typically aims to allow SNGs to provide a comparable level of public services according to their needs and differences in their fiscal capacity. In contrast, regional policy or place-based policies, pursue closing the economic development gap across territories. While results of the former are usually evaluated based on SNGs needs-adjusted per capita revenue or access and quality of local public services, the latter is measured according to GDP or income per capita.

33. Fiscal equalisation contributes to regional policy goals in a number of ways. For instance, fiscal equalisation can strengthen a sense of national citizenship among residents of diverse localities (OECD, 2019[9]). Overall, equalisation transfers can be seen as a glue that holds the country together. Fiscal equalisation can also contribute to regional and national economic growth by creating a level playing field so that inter-regional movement of labour and business happen primarily in response to economic reasons, and not because of differing net fiscal benefits in different regions.

34. In addition to differences in pursued goals, and measurement variables, there are three main characteristics that help differentiating fiscal equalisation and regional policy. First, fiscal equalisation is channelled to SNGs through unconditional transfers. This means that SNGs can decide expenditure priorities, according to each jurisdiction's needs and preferences. This is not the case for regional policy that usually funds specific projects pre-selected by central governments (CGs), and often integrates co-funding requirements for SNGs in order to get funding, following a matching-grants rationale. For instance, this is often the situation with European Structural Investment Policy. Second, while funding from fiscal equalisation transfers is always integrated in SNGs' budgets, this does not always happen with regional policy, that is sometimes implemented and executed by CGs, particularly if investments are related to large cross-regional infrastructure projects. The third main difference consists of the kind of expenditure that is financed. On the one hand, FE is primarily devoted to current expenditure. Thirty-seven per cent of OECD federal countries' SNG budgets are labour costs of public employees (e.g. teachers, professors, nurses, doctors, firefighters, police officers or social workers), while only 11% is devoted to capital expenditure. On the other hand, although new approaches for people-centred place-based policies are gaining momentum (Neumark and Simpson, 2014[7]; Garcilazo and Oliveira Martins, 2021[10]), regional policy still focuses on public investment projects that could revitalise declining economies by fostering growth through productivity gains, such as transport and connectivity infrastructure. Since in most fiscal rule frameworks, SNGs' borrowing capacity is restricted to capital investment, particularly at the local level, new current expenditure needs for SNGs generated by new public capital endowment maintenance required for regional policy programmes to include budget items to support this, or for increases in FE transfer allocation.

35. Despite these differences, there is also a relatively extensive list of similarities that could explain why fiscal equalisation and regional policy are often confused (**Figure 2**). This list includes elements such as the following: First, both FE and regional policy are designed by the CG—although sometimes this is done in dialogue and cooperation with SNGs (e.g. in Finland), it is usually the CG that takes the leading role and has the last word. There are few exceptions to this pattern, such as the decision-making process that takes place in German Bundesrat or the requirement of implicit regional unanimity to implement fiscal equalisation reforms in Spain. Second, both policies pursue national-level equity and efficiency objectives. Therefore, they are part of the national agenda, which does not always align with subnational agendas. These agenda mismatches are likely to generate political conflicts, and are heavily dependent on the political alignment of CG and SNGs, and their condition as net contributor or net recipient. This means that for both policy tools, FE and RE, there are centre (urban) versus periphery (rural) interest divergence that, when salient, can raise centrifugal constitutional tensions, such as recently seen in the United Kingdom, Spain or Canada.

Figure 2. Differences and similarities between fiscal equalisation and regional policy



36. Finally, both fiscal mechanisms have implications for territorial equity and the equity-efficiency trade-off traditionally studied by Public Economics. This has been addressed in the previous section, focused on congestion issues generated by jurisdictional size and density, and the discussion on interpersonal and territorial inequalities.

2.2. Lack of fiscal equalisation – regional policy coordination

37. Ignoring the links between FE and regional policy has translated into lack of coordination with a presumed cost-effectiveness loss. This is more likely to happen when Ministries involved in the design of both policies are not the same. In fact, as pointed out by Antti Moisio, while in some countries it is the Ministry of the Treasury that gives shape to both programmes, in others the Ministry of Internal Affairs is in charge of FE and the Ministry of Economic Affairs or the Ministry of Regional Development are responsible for regional policy. Moreover, due to the bias towards infrastructure investment that regional policy has historically shown, the Ministry of Transport/Infrastructure is responsible for a large share of territorialised CG expenditure, which is also of relevance for regional economic development, even when it is not always considered to be part of regional policy in strict terms. Lack of coordination issues become more serious when there is no clear responsibility attribution. Although the focus of this problem is often put over vertical responsibility attribution, across levels of government, according to Professor Paul Smoke, this also takes place in horizontal basis, across government departments.

38. To avoid reform deadlocks and ease political agreements on how to amend and reinforce FE and regional policy frameworks, fiscal federalism experts, such as Professor Diego Martínez-López and Senior Adviser Sverker Lindblad, consider that the "one goal, one tool" approach is best suited. Consistently, they argue that integrating too many goals in one policy tool could pose the risk of not achieving any of their objectives. Therefore, there is an overall agreement on the fact that FE and regional policy frameworks should be "coordinated but not conflated". However, as explained in Box 1, in practice, this is not always the case.

39. Furthermore, as Antti Moisio pointed out, coordinating regional policy instruments with fiscal ones can be complicated because regional policy usually goes beyond fiscal equalisation. This is because regional policy measures usually target not only the delivery of local public services but also private infrastructure and production. On the other hand, subnational governments also have a significant

incentive to enhance the capacity of local businesses, especially when subnational governments finance their activities with their own tax revenues.

Box 1. Regional Funding Systems in Germany and Spain integrate both policy goals

Compensation for weaker Länder in Germany

The German regional funding system equalises almost fully fiscal capacity differences across Länder. In addition, less developed eastern Länder used to receive additional transfers known as supplementary federal grants from the federal government in order to spur their economies. Since the reform made in the regional funding system in 2020, these complementary non-equalisation transfer entitlements are allocated through every weak region, regardless of whether they are located in the West or the East of the country.

Cooperation and competitiveness funds in Spain

It is particularly difficult to identify both FE and regional policy as separate policies in countries where both kind of transfers are integrated within the same fiscal mechanism, as is the case in Spain since 2010, when current regional funding system entered in force. In fact, this model combines purely fiscal equalisation transfers devoted to finance healthcare, education and social assistance, with regional policy alike funds targeted to less developed regions (Cooperation Fund) and most productive regions (Competitiveness Fund), with objectives and allocation requirements that resemble European Union's Structural and Iinvestment (ESI) funds (García and Murillo, 2016[11]).

2.3. Intertwined frameworks, intertwined outcomes?

40. As pointed out by the "shrinking regions" literature (Rodríguez-Pose, 2018[12]) the impact of regional asymmetries is not confined to economics, but spills over to demographic, social and political implications. Despite cross-country divergence being reduced in the EU during recent decades, within-country inequalities have increased. This can be explained by the higher economic growth achieved by large cities, which as a consequence of their unique characteristics (e.g. human capital, connectivity, clustering, agglomeration and network effects), have benefitted from globalisation and technological change.

41. Attention was raised around this asymmetry issue, particularly in countries where there are major geographical prosperity divides. According to Professors Philip McCann and Willem Sas, this is the case of the UK. This is an interesting case for study for three main reasons: evident political consequences of the core-periphery divide seen in the Brexit referendum results, an ongoing and asymmetric process of power devolution, and the salience of the Levelling-Up agenda to replace discontinued ESI allocations for British regions. In this context, experts posed a question as to whether a correlation between territorial inequalities and fiscal equalisation has been found.

2.3.1. Are fiscal equalisation payments larger in countries with larger territorial inequalities?

42. Although there is little evidence regarding this question, a sensible hypothesis would suggest that, if place-based policies succeed and regional disparities decrease, then less fiscal equalisation should be needed, at least from the fiscal capacity side. Alternatively, following Dorothée Allain-Dupré, if place-based

policies do not attain their results and regional disparities grow, then more resources should be devoted to fiscal equalisation from two perspectives:

- *Fiscal capacity perspective*: economic activity and high-income earners are concentrated in urban areas, meaning that rural tax bases get depleted.
- *Expenditure needs*: elderly population and low income families get overrepresented in rural areas, meaning that more social expenditure is needed in these territories. In this context, per capita expenditure needs in rural areas will be higher relative to urban areas, also due to increased provision costs caused by low density and lack of economies of scale.

2.3.2. Do territorial inequalities depend on asymmetric treatment provided by FE?

43. Next, we pose the question the other way around. In other words, do regions with lower fiscal equalisation transfer allocations per capita (need-adjusted) require more resources from regional policy? According to Professor Lars-Erik Borge, the key element to try to provide an answer to this question is short and long-term mobility effects.

44. In the short-term, commuters switch jobs to jurisdictions were their productivity is higher, and thus labour compensation is larger too. While this has not impact in fiscal capacity from residence-based taxation, it does affect fiscal capacity from source-base taxation. Both FE and regional policy affect this outcome.

- Transport infrastructure needed to shorten commuting distances and time in less developed regions is usually funded by regional policy, with similar consequences in the short-term.
- FE is related to funding for public transportation management, and although regions' and cities' transportation user-fee revenues are not equalised, costs often are. During the first months of the COVID pandemic, extraordinary non-equalisation grants were used in many decentralised countries to compensate SNGs for revenue losses from transport user-fees. Also the rise in teleworking because of COVID could alter these short-term mobility outcomes (OECD, 2021[13]).

45. In the long-term: mobility translates into residence changes. Its impact on SNGs revenue will be larger since personal income taxes, as a residence-based revenue source, are one of the main own-revenue sources of SNGs (OECD, 2021[1]). In the long-term, economic divergences will induce a demographic change in less developed regions. While young people without access to high education or human capital-intensive job opportunities in their original jurisdiction will likely leave (and probably never come back), the elderly more often stay.

- *Prevention*: FE could prevent depopulation and ageing phenomena by providing low fiscal capacities and large expenditure needs SNGs with enough funding to ensure access and quality to subnational public services, so residents do not leave and transfer dependency does not increase, in a vicious circle that should be addressed.
- *Treatment*: when territories are already depopulated or aged, regional policy tries to relaunch economic activity and support the catching-up process. However, for regional policy to work, highly skilled people need to be attracted to rural or less developed areas, which need local public services funded by FE. In fact, high-income citizens demand access to a higher amount/quality of services than low-income residents. This includes cultural and leisure services that are usually among non-equalised public services, since they are not considered fundamental/basic. Fiscal equalisation can also help SNGs adjust to shrinkage. In Finland and Sweden, some rural municipalities have been shrinking for decades but equalisation grants have protected them from financial collapse during the adjustment phase. In this context, the debate on how far polarisation between large and small municipalities can go arised and municipality mergers are under discussion.

Interregional and interpersonal perspectives of inequality

46. As brought up to the discussion by Professor Diego Martínez-López, authors from the First Generation of Fiscal Federalism Theory called for a centralised responsibility for redistribution objectives. However, later developments made by the Second Generation of this literature nuanced this prescription and recognised that Welfare State, often decentralised, does pursue income-redistribution goals, too.[3]

47. If we follow the same rationale, we can explore the territorial – interpersonal inequality debate from two perspectives. First, if regional policy does not reduce the gap in development levels across regions, then inequalities across territories will remain large. In this scenario, interpersonal inequalities will be lower within jurisdictions (low-income people concentrated in poor region and high-income people concentrated in rich-region) but larger across regions. This would follow the outcome predicted by Tiebout's hypothesis of "voting with one's feet" (Tiebout, 1956[14]). Although empirical literature has shown difficulties to prove this in the real world, a non-extreme case of this hypothesis could be represented by this scenario.

48. In other words, large gaps in development levels across regions mean that high-skilled workers, who are capable of extracting benefits from their skills due to technological change and globalisation, will concentrate in large cities (capitals in most cases). This equates to large interpersonal inequality across territories, too. This is the main reason argued by the literature to explain why in Europe regional disparities have increased within countries but decreased across countries. In contrast, if place-based policies would succeed, then interpersonal disparities would increase within regions, but would decrease across regions. The following Table illustrates possible interconnections in this area (**Table 1**).

Table 1. Territorial and interpersonal inequalities across and within regions

Inequality type	Across regions	Within regions
Interpersonal	Place-based policies do not directly address interpersonal income disparities across regions, but when the gap in GDP per capita across regions closes, the former will be reduced.	Place-based policies will increase interpersonal inequality within regions, since will allow high-skill workers to benefit from a wage *premia*, otherwise only concentrated in urban large cities
	Fiscal equalisation transfers allow all jurisdiction provides a similar level of public services, this means that interpersonal inequalities across regions should decrease as a consequence.	Fiscal equalisation transfers are mostly devoted to fund social policies (health, education and social protection), then will decrease interpersonal inequalities within regions.
Territorial	Place-based policies are supposed to address territorial disparities (defined in terms of levels of per capita income)	Not applicable
	Fiscal equalisation is supposed to limit regional inequalities in public service access and quality	

[33] For a more detailed discussion, please refer to Padovano (2007[15]).

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