
Geography and development

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Background

The recent (re-)discovery of geography by economists through the lens of the new economic geography literature (Krugman, 1991) has had its counterpart in policy making with the promotion of the idea that economic geography is central to understanding and influencing actual economic development. The culmination of this was the publication of the *World Development Report (WDR) 2009* by the World Bank in late 2008 (World Bank, 2008). In this report, aptly titled *Reshaping Economic Geography*, the World Bank basically makes two related claims. Firstly, and very much based on the new economic geography literature, understanding and shaping economic geography is crucial for economic development. So, after its earlier emphasis on development factors such as governance and institutions or human capital, in the WDR, the World Bank adds economic geography to the list of key drivers of economic development. Secondly, once the crucial role of economic geography for development is recognized, the WDR forcefully argues that this has far-reaching policy implications. In particular, in as far as geography is a hindrance to development, policies should be aimed at stimulating economic integration, especially between countries. Within countries, the WDR advises policy makers to focus less on, using their terminology, place-based policies and more on people-centered policies.

The WDR's policy recommendations have generated a considerable amount of debate as to whether governments should stop using place-based policies to tackle the problems of their more slowly growing areas. Central to the discussion has been the observation that the geography of economic development is uneven reflecting the economic advantages to nations and their populations of large agglomerations of economic activity. To try and stimulate the development of relatively lagging areas in a country outside these core agglomerations has been argued to be at best ineffective and at worst damaging to the economic growth of the nation as a whole. Thus, in his recent article on the blog www.voxeu.org, Indermit Gill, the World Bank's Chief Economist for Europe and Central Asia and the Director of the WDR, argues:

Regional development policies have tried to encourage - even coerce - enterprises to move away from leading regions where economic activity has become concentrated, and locate in lagging regions. Over time, these policies have become somewhat more enlightened. Instead of discouraging enterprises from locating in leading areas, they now claim to encourage economic activity in lagging regions, to 'exploit their unused potential' This is a belated recognition of the power of economic concentration. Less charitable observers

call these ‘new’ place-based policies ‘old wine in new bottles.

In response to the obvious question as to whether, in the light of this, nations should give-up on seeking to develop their less developed regions, Gill is clear:

Policy makers should instead promote economic integration of lagging with leading places’. He goes on to argue ‘The World Development Report emphasises that the most potent instruments for integration are spatially blind improvements in institutions; put more simply, the provision of education, health and public security.

The analysis and subsequent policy implications of the WDR have not gone undisputed. Whereas economists and also some policy makers have reacted favourably to the publication of the report (see the contribution by Deichmann et al. (2011)), the reception from geographers and others has been rather more hostile (see the paper by Murphy (2011), as well as Barca and McCann (2010)). As the intensity of the debate shows no sign of diminishing, and in light of the announced intent of the European Union to move to a place-based policy as a central component of its next phase of Cohesion Policy across Europe in the period 2013–2020, the discussion in this issue of the CJRES would seem to be particularly timely.

Using the WDR as a launch pad, the purpose of the present issue of CJRES is two-fold. Firstly, we want to take stock when it comes to the state of the art analysis as to the relevance of geography for development. Even though the World Bank study will (literally) serve as our starting point, the various papers in this issue look at the relationship between geography and development from various and very different angles, embracing different disciplinary perspectives. Secondly, taken together, the papers in this issue hopefully show how geography matters for economic development. The first two papers by Deichmann et al. and Murphy respectively, summarise and elaborate upon the WDR. As core authors of the report, Deichmann

et al. provide an answer to some of the criticism raised against the WDR’s take on economic geography, whereas Murphy goes beyond providing a mere critique of the report, attempting to show how the report’s framework might be enriched by drawing on insights from the literature of economic geography ‘proper’. As such, the first two papers provide examples of a constructive debate between economics and geography, which is unfortunately not that common (Brakman et al., 2011). Starting with the paper by Roberts and Goh (2011), the other papers all address and analyse more specific development cases and, despite their conceptual differences, they do all offer theoretically grounded, empirical evidence as to the importance of geography for development. In the next section, we will introduce the individual papers in somewhat more detail.

Summary and positioning of the papers

As already stated, the first paper is by the World Bank trio Uwe Deichmann, Indermitt Gill and Chor-cing Goh (2011) and since they were instrumental in the writing of the WDR, the authors are perfectly placed to summarise the report and to address some of the main critical comments that have been made. The critique focuses on the conceptual framework and on the policy implications. As to the former, and again see also the paper by Murphy (2011), the main criticism by geographers can be summed up by saying that the WDR lacks texture or (place specific) context. Deichmann et al. address this critique by arguing that, in order to draw out common patterns, (over)simplification is unavoidable and, indeed, even necessary, if one is to be able to see the wood from the trees. However, when applying the WDR framework to specific issues, it can easily be amended or complemented with contextual and place-specific concerns. When it comes to the policy implications, the paper restates the preference expressed in the WDR for place-neutral and people-specific policies and also sets this policy view against those of the Organisation for Economic Co-operation and Development (OECD) and the EU, where these last two

institutions are much more in favour of place-based policies than the World Bank. The reaction by the OECD (see Garcilazo et al., 2010) and EU regional policy advisers (see Barca and McCann, 2010) to the summary of the WDR by Gill (2010) on the blog www.voxeu.org makes these different policy views rather explicit even though, in their paper, Deichmann et al. see these differences as potentially more gradual than fundamental. But this last view seems to be contested by Barca and McCann (2010).

Taking the WDR as his starting point, Murphy (2011) first briefly summarises why geographers are rather critical of the report and, more generally, why geographers do not see much value added in the new economic geography literature that provides its inspiration. However, rather than merely restating the important (but well known) epistemological differences between the way geographers and economists view the world, Murphy takes the WDR perspective seriously but seeks to build upon it by asking how it can be enriched by drawing on recent advances in the disciplines of development studies and economic geography. In particular, Murphy sets out to explain how context-specific relationships, power asymmetries and institutions help to determine the development outlook for specific locations. By doing so, Murphy aims to help policy makers by adding, basically, context, to the, in his view, rather general analytical framework and policy implications of the WDR.

The paper by Roberts and Goh (2011) effectively combines the insights from the first two papers by applying the main analytical framework of the WDR with its emphasis on the 3Ds (density, distance and division) to a specific case or context, the municipality of Chongqing, whose development lies at the heart of China's 'Go West' strategy and which itself has recently adopted an explicitly spatial development strategy. Within the WDR framework, density is thought to be most important at the urban or local level where more densely populated places are believed to enjoy larger (net) agglomeration economies. Distance refers to the ease or speed with which households or firms can gain access to the economic centres or agglomerations and it is basically how well-connected places are. The

role of division mainly, but not only, plays itself out at the international level and it concerns the (frequently man-made) barriers to economic interaction. For the specific case of Chongqing, a huge region with approximately 30 million inhabitants, the authors carry out an empirical analysis to find out how relevant these 3D's are for the municipality and they find that distance, and possibly density, seem to matter as predicted by the WDR framework, but there is little evidence as to the relevance of division. The somewhat ambiguous results as to the role of density are important from a policy perspective because, as is true for many large Chinese cities or regions, the development policy by the Chinese authorities is aimed at maximising the alleged benefits of density.

One of the most notable features of Chongqing's development process is the rapid rural–urban transformation that the municipality has undergone as it has grown over the last decade. The necessity of such a spatial transformation for successful development to occur is an emphasis of the WDR, which highlights the importance of removing barriers to rural–urban migration as a strategy for overcoming problems of distance for lagging areas of a country. This brings us nicely to the paper by Gödecke and Waibel (2011), which focuses on the process of rural–urban transformation in a 'typical' Thai village, Sab Jaroen, which is located in the Phetchabun province of Thailand, some 350 km North of Bangkok. Using detailed survey data, Gödecke and Waibel analyse the determinants of both migration intensity—defined as the sum total of migrant months per household divided by the total number of household members—and household income per capita. In doing so, they provide evidence of migration being driven by a household's perception of its own relative deprivation within the village. Thus, migration of one or more of its members represents a strategy for improving a household's livelihood when confronted with perceived relative poverty. However, while such migration is found to increase household income per capita, Gödecke and Waibel also highlight that its highly selective nature has left the village with a gap in the age group between 14 and around 44 among, in particular, its male

population. Furthermore, they highlight the riskiness of such a livelihood strategy in the face of major macroeconomic shocks. Hence, following the Asian financial crisis, evidence of reverse remittances from rural households to their migrant members in urban areas is presented. These reverse remittances help to highlight the co-insurance which rural–urban migration can provide for households and provide a rationale for the close social ties which migrants are found to maintain with the village.

Gödecke and Waibel's paper serves to highlight that rural–urban migration can occur because of 'push', as well as 'pull' factors: that is to say, that it may be driven by hardship in the countryside as much as by the attraction of the bright lights of the city. Over the decades to come, one of the potentially most important 'push' factors behind migration in many developing countries is likely to be climate change. In particular, where it serves to reduce agricultural productivity, climate change can be expected to provide an added impetus for rural–urban migration. While it does not discuss its implications for migration, the paper by Kumar (2011) does aim to model the spatially heterogeneous impacts of climate change on Indian agriculture using a panel of data for 271 districts. To do this, Kumar first uses historical data to estimate climate response functions that link observed spatial variations in agricultural outcomes to climate conditions. These estimated climate response functions are then used in conjunction with projections from climate change prediction models to provide predictions of the spatial impacts of climate change. Kumar reports that the most severe impacts of climate change on agricultural outcomes are likely to be found in the high-value agricultural regions of Haryana, Punjab and Uttar Pradesh along with the dry regions of Gujarat and Rajasthan. By contrast, climate change is predicted to leave agriculture in the eastern states of Bihar and Karnataka, along with the inland region of Karnataka, relatively unscathed. A novel feature of the methodology adopted by Kumar is the explicit incorporation of spatial effects into his estimation of the climate response functions using spatial econometric techniques.

Such techniques were developed in geography departments in both the US and the UK but have also subsequently been adopted by some economists, providing a relatively rare example of cross-fertilisation of techniques between the two disciplines.

Keeping the focus on India, but with a rather different emphasis, D'Costa (2011) asks what a development model that relies, to no small extent, on the (continued) strong growth of the IT sector means for the country's development prospects. Despite the undeniable expansion of the Indian IT sector and India's impressive growth record, the author sees a model of development that relies on the IT sector as being a rather vulnerable one that will not do much to transform the Indian economy or to reduce economic and social inequalities. D'Costa cites the class bias, the heavy reliance on the US market, the disconnect with the rest of the Indian economy and India's specialisation in relatively easily contested niches of the IT sector as reasons for pessimism regarding the sector's chances of becoming a platform for sustained overall growth of the economy.

India's rapid growth in recent decades is often attributed to its dramatic process of trade liberalisation in the early 1990s. The benefits of trade liberalisation as a means of overcoming man-made divisions between countries associated with the existence of both tariff and non-tariff barriers to trade are also heavily emphasized in the WDR. The vehicle which economists often use to examine the impact of such barriers on trade flows is the gravity model of international trade. This model is also notable because it assigns a crucial role to distance in explaining the magnitude of bilateral trade flows. Thus, exports from a country i to another country j are modelled as being inversely related to the distance between the two countries, so that physical proximity engenders more intense trading relations. Prior to the new economic geography, the gravity model provided a rare example of economists taking geography seriously. In particular, the model was unusual for its explicit incorporation of space in explaining economic outcomes. As such, this edition of CJRES would hardly be complete

without a gravity model paper. Yakop and van Bergeijk (2011) use the gravity model framework to examine whether or not economic diplomacy—as captured by the number of embassies and consulates that an exporting country has in an importing country (and vice versa)—has any impact on trade flows. They find that there is indeed an impact but that it is more important for export facilitation than it is for import facilitation. The impact of economic diplomacy is also found to be significant for both North-South and South-South trades but not for North-North trade. This is consistent with the existence of greater market failures in trade involving developing countries, for which information tends to be more incomplete.

The paper by Turner (2011) adds a further dimension by considering how geographical variations in access to finance, and, in particular, specific channels to certain kinds of financial products, might affect economic development as proxied by the export performance of firms in particular locations. As Turner points out, while there has been debate among economic geographers, there are a number of reasons to believe that spatial unevenness in the ability to access financial services could produce quite marked geographic variations in economic development, particularly in a world which requires interaction between key economic agents and where specialized human capital tends to concentrate in large agglomerations. Using an extensive data set for some 27 sectors and 120 countries relating to the period 1985–2000, Turner finds compelling evidence that ‘financial access and efficiency variables—particularly the geographic penetration of bank branches and the business loan application process—significantly impact exports’ (Turner, 2011). As the author indicates, examining the actual mechanisms at work is beyond the scope of the current paper but there is clearly a need for further work in this direction.

Conclusions

It is hoped that the articles presented in this edition of CJRES will help to further advance understanding of the relationship between geography and the

economic development of nations and their regions. While the general conclusion must surely be that geography, in both its physical and human forms, matters in the economic development process, the articles demonstrate the complex nature of the interactions that exist. There remain many gaps in our understanding and where more research is needed. Thus, while there is general acceptance of the economic benefits that arise from the spatial concentration of economic activity in a nation, the question of the point at which these are offset by the costs imposed by congestion remains open. There remains very little empirical evidence on the nature of the possible trade-offs and yet this is precisely an area where some economists have emphasized the need to recognize how the geography of economic development can have an influence on national growth (Baldwin and Martin, 2004; Kaldor, 1970).

Moreover, the settlement pattern of many countries, particularly in the developed world, is not characterized by one large spike of economic concentration surrounded by mainly small rural settlements but is rather that of an urban rural continuum with very large, medium-sized and smaller cities through to relatively remote rural areas. It is not clear what the benefits to economic development from encouraging growth in urban areas of different sizes are, whether there is in some sense an optimal *form* of settlement pattern and what role there may be for *spatially targeted* development policy in this.

Returning to the policy recommendations contained in the WDR, while it is desirable to integrate leading and lagging regions to promote economic development, it is not obviously the case that the use of spatially blind initiatives to strengthen the education and health of a country’s population is likely to be a particularly *spatially inclusive* way of doing this. The hard reality of the matter is that different places within a country vary considerably in the ability of their residents to benefit from national policies. The effect of economic restructuring across space is to concentrate people with different educational and health needs in particular places. Those who have the highest need often require customized policies that recognize the disproportionate difficulties they face compared to some

hypothetical average. Recognising the needs of people in a *specific place* in delivering and thus targeting policy would, therefore, seem essential unless the needs of these individuals are simply to be ignored.

Endnotes

¹ The authors of this introduction acted together as main editors for this issue of the journal. The paper by Roberts and Goh was handled by the 1st editor and 3rd editor and received the same referee procedure as the other papers.

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