

Bridging the Red-Blue Divide: A Proposal for U.S. Regional Tax Relief WP 19/03

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ABSTRACT

The United States is the only large federal country that does not have an explicit way to reduce the economic disparities among more and less developed regions. In Germany, for example, federal revenues are distributed by a formula that takes into account the relative level of wealth of each state (the so-called Finanzausgleich, or fiscal equalization). Similar mechanisms are found in Australia, Canada, India, and other large federal countries. The United States, on the other hand, has no such explicit redistribution. Each state is generally considered equal and sovereign and the federal government does not distribute revenues to equalize the states' spending capacity. While the overall impact of the federal tax and transfer system may be to shift revenues from richer to poorer states, this is not openly acknowledged, and to the extent it is discussed in the literature, it is generally condemned as unfair to the states that send more revenues to Washington than they get back in federal transfer payments. Nor is it politically likely that the US will adopt a formal fiscal equalization mechanism, because unlike Germany or Canada it decisively settled the problem of secession in the Civil War and therefore does not fear a potential break-up along regional lines.

This Article proceeds from the normative position that the increasing gap between the richer and poorer areas of the United States is a problem that requires federal intervention, and that the federal tax system can play a role in that intervention. There is increasing evidence of a yawning economic gap between the eastern heartland (the region between the Mississippi and the eastern slope of the Appalachians) and the rest of the U.S., which translates into higher permanent unemployment and minimum wage employment, opioid abuse, imprisonment, and premature death. This gap contributed to the political division of the country revealed in the 2016 presidential election, and needs to be addressed if we want to prevent ever further polarization.

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The Article first assesses past and current attempts to enact tax provisions to help disadvantaged regions in the United States. On the federal level the prime example is Internal Revenue Code (IRC) section 936, which provided tax breaks for investments in Puerto Rico. This section was widely criticized and was ultimately repealed in 1996 with a ten-year phase-out. The Article will argue that in fact the evidence shows that 936 was quite successful in creating and maintaining jobs in the territory, and that its repeal led directly to Puerto Rico's current economic problems, which began when section 936 was finally abolished in 2006. A contrary example was IRC section 199, the domestic manufacturing deduction, which was intended to stimulate manufacturing in low-growth areas like the rust belt, but was captured by coastal industries like software and entertainment and was ultimately repealed in 2017 because it was widely conceded to be ineffective. Its replacement, the Foreign Derived Intangible Income (FDII) provision in the Tax Cuts and Jobs Act of 2017 (IRC section 250), is geared toward aiding exports by intangible intensive industries and is therefore more likely to help the richer areas where these industries are located. On the state and local level, there exists a proliferation of tax incentives, but in many cases they do not result in successful development, and they tend to confer windfalls on multinationals who would have invested in the US anyway and to favor investment in already rich cities, such as the twenty finalists and the ultimate winner on Amazon's list of candidates for its second headquarters.

The Article then takes a comparative perspective by surveying several more or less successful tax measures taken to encourage development of less developed regions, including in China and Israel.

Finally, the Article develops a proposal for using federal taxes to influence multinationals to invest in poorer locations. It builds on an existing list of approved targets, namely the so-called "opportunity zones" created by the 2017 tax reform. Opportunity zones are limited to census tracts that have at least a 20% poverty rate or are below 80% of the state or city median income. An investor in an opportunity zone gets a tax break, although it is limited to gains that she has already made from other investments. The opportunity zone provisions have been widely criticized as only helping investors and not being limited to people and areas in need. We would limit our proposal to opportunity zones in the target area, i.e., between the Mississippi and the eastern slope of the Appalachians, and exclude major metropolitan zones in that area. We propose that the federal government should declare that a corporation that invests in an opportunity zone in the target area would pay no federal tax on profits from that zone. To define profits from the opportunity zone and segregate them from other profits, we suggest using a formula like the one the states use; take total corporate profit and multiply it by [(wages paid to employees in the opportunity zone divided by total wages) plus (number of employees in the opportunity zone divided by total employees)]/2. This type of formula should work to incentivize corporations to move jobs to the preferred areas. With jobs come homes, good schools and everything else the richer areas of the United States already have in abundance.

Introduction

This Article proceeds from the normative position that the increasing gap between the richer and poorer areas of the US is a problem that requires federal intervention and that the federal tax system can play a role in that intervention. There is increasing evidence of a yawning economic gap between the eastern heartland (the region between the Mississippi and the eastern slope of the Appalachians) and the rest of the U.S., which translates into higher permanent unemployment and minimum wage employment, opioid abuse, imprisonment, and premature death.² This gap contributed to the political division of the country revealed in the 2016 presidential election, and needs to be addressed if we want to prevent ever further polarization.

The problem of regional disparities is common in large countries, and most large federal countries have explicit ways to reduce the economic disparities between more and less developed regions. In Germany, for example, federal revenues are distributed by a formula that accounts for the relative level of wealth of each state (the so-called Finanzausgleich, or fiscal equalization). Similar mechanisms are found in Australia, Canada, India, and other large federal countries. The United States, on the other hand, has no such explicit redistribution. Each state is generally considered equal and sovereign and the federal government does not distribute revenues to equalize the states' spending capacity. While the overall impact of the federal tax and transfer system may be to shift revenues from richer to poorer states, this is not acknowledged and to the extent it is discussed in the literature it is generally condemned as unfair to the states that send more revenues to Washington than they get back in federal transfer payments. Nor is it politically likely that the US will adopt a formal fiscal equalization mechanism, because unlike Germany or Canada it decisively settled the problem of secession in the Civil War and therefore does not fear a potential break-up along regional lines (Part 1).

If fiscal equalization in unrealistic, can the federal tax system play a role in solving the regional disparities issue? The Article addresses past attempts to enact tax provisions to help underdeveloped regions in the US. On the federal level the prime example is IRC section 936, which provided tax breaks for investments in Puerto Rico. This section was widely criticized and was ultimately repealed in 1996 with a ten-year phase-out. The Article argues that in fact the evidence shows that section 936 was quite successful in creating and maintaining jobs on the island and that its repeal led directly to the current economic problems of Puerto Rico, which began when section 936 was finally abolished in 2006. A contrary example was IRC section 199, the domestic manufacturing deduction, which was intended to help the rust belt but was captured by coastal industries like software and entertainment and was ultimately repealed in 2017 because it was widely conceded to be ineffective. Its replacement, the Foreign Derived Intangible Income (FDII) provision in the Tax Cuts

² See the data summarized and discussed in part 1 below.

and Jobs Act of 2017 (IRC section 250), is unlikely to be effective as well because it focuses on export oriented, intangible intensive industries that are primarily located on the rich coasts (Part 2). On the state and local level, there exists a proliferation of tax incentives, but in many cases they do not result in successful development, and they tend to confer windfalls on multinationals who would have invested in the US anyway and to favor investment in already rich cities, such as the twenty finalists and the ultimate winner on Amazon's list of candidates for its second headquarters (Part 3). From a comparative perspective, many countries have taken tax measures to encourage economic growth in less developed regions. The Article surveys two of these experiences, in China and Israel, which had mixed results (Part 4).

The Article then develops a proposal for using federal taxes to influence multinationals to invest in poorer regions, such as the eastern heartland. It builds on an existing list of approved targets, namely the so-called "opportunity zones" created by the 2017 tax reform. Opportunity zones are limited to census tracts that have at least a 20% poverty rate or are below 80% of the state or city median income. An investor in an opportunity zone gets a tax break, although it is limited to gains that she has already made from other investments. The opportunity zone provisions have been widely criticized as only helping investors and not being limited to people and areas in need. We would limit our proposal to opportunity zones in the target area, i.e., between the Mississippi and the eastern slopes of the Appalachians, and exclude major metropolitan zones in that area. We propose that the federal government should declare that a corporation that invests in an opportunity zone in the target area would pay no federal tax on profits from that zone. To define profits from the opportunity zone and segregate them from other profits, we suggest using a formula like the one the states use: take total corporate profit and multiply it by [(wages paid to employees in the opportunity zone divided by total wages) plus (number of employees in the opportunity zone divided by total employees)]/2. This type of formula should work to incentivize corporations to move jobs to the preferred areas. With jobs come homes, good schools and everything else the richer areas of the US already have in abundance (Part 5). Part 6 concludes.

1. Fiscal Equalization in Federal Countries and US Exceptionalism

The United States is the only large federal country in the world that does not employ some mechanism of fiscal equalization.³ Australia, Canada, Germany,

³ Kirk J. Stark, Rich States, Poor States: Assessing the Design and Effect of a U.S. Fiscal Equalization Regime, 63 Tax L. Rev. 957 (2010); Michael Keen, Peculiar Institutions: A British Perspective on Tax Policy in the United States, 50 Nat'l Tax J. 779, 789 (1997) ("the United States stands alone among the federations of the advanced economies in its failure to equalize across the states"); Jun Ma, Intergovernmental Fiscal Transfer: A Comparison of Nine Countries, World Bank (1997). A potential exception was the general revenue sharing (GRS) program that was created under the Nixon Administration and allowed to expire in 1986, See Congressional Research Service, General Revenue Sharing: Background and Analysis (January 9, 2009. RL31936). The GRS program was authorized in the

India, South Africa, and many other federal countries have in place a system of "equalization grants" under which the central government makes fiscal transfers to ensure that the resources available to state or provincial governments do not vary too much.⁴ In Canada, for example, section 36 of the Constitution requires the federal government "to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation."⁵

There is no such fiscal equalization system in the US. As a result, states with lower economic resources must choose between taxing more and providing fewer services than richer states. For example, if Connecticut were to impose average state taxes, it would collect \$7205 per capita, while Mississippi would collect \$3784. In fact, Connecticut collects \$6630 per capita (with lower taxes than the national average) while Mississippi collects \$4092 (with higher taxes than the national average), leaving Mississippi able to provide \$2538 per capita less than Connecticut despite imposing higher taxes.⁶

In practice, the federal tax and transfer system does result in some states' residents paying more in taxes to the federal government than they collect in benefits, and others paying less. For many years, the Tax Foundation published an annual report on "Federal Tax Burdens and Expenditures by State", which describes which states are beneficiaries (primarily the red states) and which are net donors (primarily the blue states). But this is an inaccurate measure, for example because it includes government salaries and procurement contracts as federal transfers, and it has not been updated since 2005.⁷

State and Local Fiscal Assistance Act of 1972 (P.L. 92-512, the 1972 Act), and was extended three times before finally expiring on September 30, 1986. Over the almost 15-year life of the GRS program (1972 through 1986), more than \$83 billion was transferred from the federal government to state and local governments. From 1972 to 1980, states received approximately one-third of the grants and local governments received two-thirds. State governments were excluded from GRS beginning in the 1981 fiscal year. The CRS report states that "[t]he rationale behind GRS in 1972 cannot be traced to a single political or economic objective, such as economic stimulus. The turbulent economic and political environment that characterized the 1960s and 1970s led proponents and opponents of GRS to modify their political and economic arguments as that environment changed. Generally, GRS could be implemented to (1) initiate intergovernmental fiscal reallocation; (2) address state and local government liquidity crises; and (3) synchronize federal and state-local fiscal policy." But the GRS was never a systematic fiscal equalization mechanism, and it was spread among all states and localities, not limited to poorer ones.

⁴ See generally Robin Boadway and Anwar Shah eds., Intergovernmental Fiscal Transfers: Principles and Practice (2007).

⁵ Constitution Act, 1982, 30 & 31 Vic. Sec. 36 (U.K.).

⁶ Stark, 958 (2005 numbers).

⁷ Stark, 966. The states receiving the most from the federal government were NM, MS, AK, LA, WV, ND, AL, SD, KY and VA. The states contributing the most were NJ, NV, CT, NH, MN, IL, DE, CA, NY and CO. https://taxfoundation.org/tag/federal-taxes-paid-vs-spending-received-by-state/.

Instead, as the Nobel-prize winning economist James Buchanan explained in 1950, the proper target for fiscal equalization policies are not the states, but rather individuals living in those states: "[t]he policy objective for intergovernmental transfers then becomes one, reduced to individual terms, of providing or ensuring 'equal fiscal treatment for equals'".8 Buchanan's goal was to ensure that "[p]ersons earning the same income and possessing the same amount of property will no longer be subjected to a much greater fiscal pressure in Mississippi than in New York, solely because of residence in Mississippi."9 This, he argued, is necessary from an efficiency perspective to prevent residents of Mississippi from moving to New York just because they would get more services for each dollar they pay in tax. From this perspective, the Tiebout hypothesis that inter-state mobility in the US is driven by an efficient sorting mechanism (some people prefer high taxes and high services and others the opposite) is wrong, because Tiebout assumed that there are no "net fiscal benefits" that can be achieved by moving from one state to another.¹⁰

However, the general academic consensus has until recently been against fiscal equalization. The main argument against it is that giving the government of poorer states fiscal equalization payments may reward wasteful spending without helping individuals residing in these regions. This has been a major critique of fiscal equalization regimes in Germany, Italy and Canada. Even Buchanan recanted his earlier support for fiscal equalization. Support for fiscal equalization.

⁸ James M. Buchanan, Federalism and Fiscal Equity, 40 Amer. Econ. Rev. 583 (1950).

⁹ Buchanan, 591. See also Robin Boadway &Frank Flatters, Efficiency and Equalization Payments in a Federal System of Government: A Synthesis and Extension of Recent Results, 15 Can. J. Econ. 613 (1982); Anwar Shah, A Fiscal Need Approach to Equalization, 22 Canadian Tax Policy 99 (1996); Anwar Shah, A Framework for Evaluating Alternate Institutional Arrangements for Fiscal Equalization Transfers, World Bank Policy Research Working Paper 3785 (December 2005); Anwar Shah, A Practitioner's Guide to Intergovernmental Fiscal Transfers, World Bank Policy Research Working Paper 4039 (2006).

¹⁰ Charles M. Tiebout, A Pure Theory of Local Expenditures, 64 J. Pol. Econ. 416 (1956); Stark, supra.

¹¹ See, e.g., Jack M. Mintz, Provincial Fiscal Equalization and Territorial Formula Financing (2005) (Canada's system is too complex and undermines transparency); Michael Smart & Richard Bird, Federal Fiscal Arrangements in Canada: An Analysis of Incentives (1996) (equalization may lead recipient governments to adopt more distortionary taxes, and insulate them from the fiscal effects of taxpayer exit); Sam Bucovetsky and Michael Smart, The Efficiency Consequences of Local Revenue Equalization: Tax Competition and Tax Distortions, CESifo Working Paper 767 (2002).

¹² See, e.g., David Albouy's study of the Canadian fiscal equalization system, which he found exacerbated financial inequities. David Albouy, EVALUATING THE EFFICIENCY AND EQUITY OF FEDERAL FISCAL EQUALIZATION, http://www.nber.org/papers/w16144.pdf ("Canadian equalization policy appears neither efficient nor equitable, but exacerbates pre-existing inefficiencies and underfunds minorities. Locational inefficiencies cost Canada 0.41 percent of income annually and cause over-funded provinces to have populations 31 percent beyond their efficient long-run levels").

¹³ James M. Buchanan, Fiscal Equalization Revisited: Welfare Trap or Helping Hand? (2002).

Beyond these arguments, the fundamental reason the US will never adopt a fiscal equalization mechanism is its history. Countries that have such a mechanism are typically countries with a history or actual or potential division, with equalization grants being the glue that holds the country together. In Canada, for example, Quebec, which nearly seceded from Canada in two closely contested independence referendums, is the main beneficiary of fiscal equalization.¹⁴ Likewise, the German fiscal equalization system, which dates to the origins of the federal republic, was enhanced upon unification in 1990 to bind together the richer west and the poorer east.¹⁵ In the US, on the other hand, the decisive victory of the Union in the Civil War has meant that secession is a Constitutional impossibility, and a US fiscal equalization program seems highly unlikely to ever be enacted. As Kirk Stark writes:

Unlike other federations that have adopted equalization policies, the United States is under no threat of secession or other sectional crisis that might motivate such a reform to the country's intergovernmental fiscal arrangements. The cluster of poor states that stand to benefit most from an equalization regime, however, represent a key (and growing) electoral prize in U.S. politics. If equalization is to gain a political footing in the United States, the most likely path would be through the efforts of political entrepreneurs using it as a policy reform designed to win the allegiance of that region's voters. Of course, equalization is not the exclusive policy tool available to these entrepreneurs, perhaps not even the most effective; yet it may offer promise as a high-visibility reform that signals a new approach to designing U.S. institutions of fiscal federalism. 16

This seems unlikely to be right, from a 2019 perspective. The idea that the rise of the South would enable Southern politicians to successfully enact a fiscal equalization program ignores the fact that this has not happened in the long years of Southern political influence over first the Democratic and later the Republican parties. However, it may be that concern about the result of the 2016 election will lead some politicians from both parties to support less extreme forms of aid for disadvantaged regions, such as the opportunity zone legislation that was proposed on a bipartisan basis and enacted into law in 2017.17

¹⁴ Cite.

¹⁵ Wolfgang Renzsch, Financing German Unity: Fiscal Conflict Resolution in a Complex Federation, 28 Publius 127 (1998). This system is now being re-evaluated and must be changed by 2019. See Wolfgang Kitterer, Bundesstaatsreform und Zukunft der Finanzverfassung, FiFo-CPE Discussion Papers 07-3 (2007); Valeria Losco, Competition and Equalization: Rethinking German Federalism after Recent Legislative Reform (2006); Jochen Zimmer, The German Financial Equalisation System: Taking Account of Differences in Regional Purchasing Powers (2018).

¹⁶ Stark, 961.

¹⁷ See discussion below.

We believe that a tax incentive proposal, like the one outlined in part 5 below, is more politically feasible than fiscal equalization. Fiscal equalization is unlikely in the United States for the reasons given above, and because the idea that the richer states should help out the poorer states is antithetical to the American conception of federalism as a union of equal sovereign states with equal dignity to the federal government above them. ¹⁸ In addition, there are practically no supporters of fiscal equalization in the US (even Buchanan recanted) and the discourse is about how unfair it is that some states pay more and receive less from the federal government than others (see, e.g., the current debates about the cap imposed in 2017 on the state and local tax deduction, perceived by some as unfair to the blue states). 19 Tax incentives. on the other hand, are a long American tradition, both at the federal level and at the state and local level.²⁰ Moreover, the kind of tax incentive we propose would be supported and lobbied for by all the large corporations that derive primarily US source income and are still much more heavily taxed than their peers who rely primarily on foreign income (and can obtain a zero tax rate under the terms of the 2017 tax reform).21

Recently, David Schleicher has suggested that any problems with regional inequality in the US can be solved by reducing barriers to mobility and encouraging people to move. Schleicher argues that America has become a nation of homebodies. Rates of inter-state mobility, by most estimates, have been falling for decades. Even research that does not find a general decline finds that inter-state mobility rates are low among disadvantaged groups and are not increasing despite a growing connection between moving and economic opportunity. Perhaps more important than changes in overall mobility rates are declines in mobility in situations and places where it is particularly important. People are not leaving areas hit by economic crises, with unemployment rates and low wages lingering in these areas for decades. And people are not moving to rich regions where the highest wages are available.

Schleicher advances two central claims. First, he argues that declining interstate mobility rates create problems for federal macroeconomic policymaking. Low rates of inter-state mobility make it harder for the Federal Reserve to meet both sides of its "dual mandate" of stable prices and

¹⁸ [Cites].

¹⁹ See Hemel.

²⁰ See, e.g. the discussion of IRC sections 936, 199, 250, and all the previous iterations of opportunity zones below. For state and local tax incentives see part 3.

²¹ See Avi-Yonah on TCJA. While it is true that Southern politicians have traditionally opposed programs that could help their region like Obamacare, a program geared toward job creation in the South and Midwest is likely to have their political support.

²² David Schleicher, Stuck: The Law and Economics of Residential Stagnation, 127 Yale L.J. 78 (2017).

maximum employment; impair the efficacy and affordability of federal safety net programs that rely on state and local participation; and reduce both levels of wealth and rates of growth by inhibiting agglomeration economies. While determining an optimal rate of inter-state mobility is difficult, policies that unnaturally inhibit inter-state moves worsen national economic problems.

Second, Schleicher argues that governments, mostly at the state and local levels, have created a huge number of legal barriers to inter-state mobility. Land-use laws and occupational licensing regimes limit entry into local and state labor markets; differing eligibility standards for public benefits, public employee pension policies, homeownership subsidies, state and local tax regimes, and even basic property law rules reduce exit from states and cities with less opportunity; and building codes, mobile home bans, federal location-based subsidies, legal constraints on knocking down houses and the problematic structure of Chapter 9 municipal bankruptcy all limit the capacity of failing cities to "shrink" gracefully, directly reducing exit among some populations and increasing the economic and social costs of entry limits elsewhere.

Schleicher concludes his article as follows:

Whether or not it adopts these particular policy proposals, it is imperative that the federal government take action to combat stagnation in our labor market. Many of the problems described here—zoning, occupational licensing, fiscal crises in declining cities—are getting worse over time. As these problems fester, labor mobility will continue to decline, monetary policy will be less effective, growth will be slower, and the tax burden of funding the safety net will be higher.

These economic costs come along with perhaps more severe political ones. The 2016 presidential election has been interpreted by some as the revenge of residents of rural and exurban areas left out of the economic boom we have seen in richer metropolitan areas. To the extent that this interpretation of the 2016 election is correct, a policy agenda aimed at increasing mobility is a tool for addressing the concerns of those rural and exurban voters. Further, such an agenda would capture the spirit of this Article's argument that residents of rich urbanized areas are excluding residents of poorer exurban ones from opportunity. Politicians should consider pushing for reforms that will break down geographic barriers to opportunity. Doing so will not only make the country richer, but will further the political ideal of forging a unified economy and people from our many regions and groups.²³

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²³ Schleicher, supra.

Schleicher is correct in pointing out the barriers to mobility from poorer to richer areas imposed by residents of the richer area, and in his call for reform to overcome them. Such reforms may increase overall US economic growth and improve the lives of the movers. However, it seems unlikely that such reforms could solve the problem for those who stay behind.²⁴ People may have good reasons to wish to stay where they were born and grew up and where their family lives, rather than uprooting to a new and very culturally different area, regardless of the economic costs or benefits. The idea that solving regional poverty should be based on easing the path for all residents of Mississippi or Alabama to move to New York or California seems farfetched because it ignores hundreds of years of US history and culture.²⁵

Even economists are beginning to understand that encouraging all the residents of the poorer regions to move elsewhere will not solve the political problems revealed by the 2016 election results, and that something should be done to help those regions left behind by globalization. A recent paper by Benjamin Austin, Edward Glaeser, and Lawrence Summers argues that perhaps, contrary to the conventional economic wisdom, there is a legitimate role for the federal government to play in adopting place-based policies. They point out that while historically there has been significant convergence of the various American regions, in recent years the economic convergence of American regions has greatly slowed, and rates of long-term nonemployment have even been diverging. Simultaneously, the rate of non-employment for working age men has nearly tripled over the last 50 years, generating a terrible social problem that is disproportionately centered in the eastern

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You shall leave everything you love most dearly: This is the arrow that the bow of exile Shoots first. You are to know the bitter taste Of others' bread, how salt it is, and know How hard a path it is for one who goes Descending and ascending others' stairs.

Dante Alighieri, Divine Comedy, Par. 17:55-60.

²⁴ It seems unlikely, for example, that wages would rise in the poor areas because labor supply will be reduced, given the lack of job opportunities in those areas and the relative lack of skills of those who stay, who tend to have lower education levels than those who move.

²⁵ For the opposite point of view see, e.g., Jesmyn Ward's moving account of why she, as a double National Book Award-winning black woman writer, chose to move back from San Francisco to rural Mississippi. Jesmyn Ward, Why I Decided to Return Home to the South, http://time.com/5349517/jesmyn-ward-my-true-south/. Or read Dante Alighieri on the bitterness of exile:

²⁶ Benjamin Austin, Edward Glaeser and Lawrence H. Summers, Saving the Heartland: Place-Based Policies in 21st Century America, Brookings Papers on Economic Activity (2018).

parts of the American heartland (i.e., the region between the Mississippi river and the eastern Appalachians). 27

Austin, Glaeser, and Summers divide the United States into three regions: The coastal states, the eastern heartland (inland states formed before 1840) and the western heartland (inland states formed after 1840). ²⁸ They then describe the differences between the three regions in terms of GDP growth, the not working rate, mortality rates, opioid abuse and imprisonment rates. On all criteria, the eastern heartland has in recent years fared worse:

The coastal states have seen their real economies grow by 342 percent from 1965 to 2016. The western heartland has grown by 475 percent over the same period. The eastern heartland has experienced the most sluggish growth, at 187 percent...

The trends in GDP are matched by the trends in the not-working rate. Figure 11 shows the prime age male not-working rate since 1980. Before the recession of the early 1980s, nonemployment was roughly comparable on the coasts and in the eastern heartland. The western heartland had the lowest levels of not working. Since 2000, this ordering has been stable. The not-working rate has been highest in the eastern heartland and lowest in the western heartland; the coasts are in between.

Figure 12 shows mortality rates between the three regions for prime age men. Between 1970 and the early 1980s, mortality fell smoothly for all three regions and the ordering was stable. The western heartland was the healthiest region of the country. During the early 1980s, male mortality rose on the coasts, partially reflecting the scourge of AIDS. Since the 1990s, the eastern heartland has been the outlier, with relatively high, and even occasionally rising, levels of mortality for prime age men. If we seek to understand the striking fact of rising prime age male mortality, as noted by Anne Case and Angus Deaton (2015, 2017), we need to look at the eastern heartland.

Figure 13 shows county-level opioid prescriptions per capita across the United States. These are particularly high in the low-employment areas of the eastern heartland.

²⁸ This is not entirely accurate since it would include in the target area Arkansas (1836) and exclude Wisconsin (1848) and Minnesota (1858), so we prefer the geographical limitation of the eastern heartland as the area between the Mississippi and the eastern slopes of the Appalachians, although it is certainly defensible to include Arkansas as well as Oklahoma (1907) even though they lie west of the Mississippi.

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²⁷ For documentation of the health care effects of unemployment in these areas see Jonathan Metzl, Dying of Whiteness: How the Politics of Racial Resentment is Killing America's Heartland (2019).

A final social problem is imprisonment, which affects a significant share of the male population in many states. Until the mid-1990s, imprisonment rates were generally higher on the coasts than in the western heartland. Between the mid-1990s and 2010, the western heartland had the highest imprisonment rate. Now, both heartlands have imprisonment rates that are dramatically higher than the imprisonment rates on the coasts.²⁹

Austin, Glaeser, and Summers then raise the question whether these more permanent economic divisions across space should lead American economists to rethink their traditional skepticism about place-based policies. They document that increases in labor demand appear to have greater impacts on employment in areas where not working has been historically high, suggesting that subsidizing employment in such places could particularly reduce the not working rate. They then suggest that place-specific pro-employment policies, such as a ramped up Earned Income Tax Credit, that are targeted towards regions with more elastic employment responses, however financed, could plausibly reduce suffering and materially improve economic performance.

While this paper is a remarkable about face,³⁰ and its suggestion that the EITC can be increased for poor regions (rather than, as Schleicher suggests, increased in the rich regions to encourage more people to move there) is a step forward, the solution proposed in the Austin et al. paper is still quite

²⁹ Austin, Glaeser and Summers, 170-171.

³⁰ See the economics literature critical of place based policies in Austin et al., 40-54; Kline, Patrick, and Enrico Moretti, "Local economic development, agglomeration economies, and the big push: 100 years of evidence from the Tennessee Valley Authority." 129 Quarterly Journal of Economics 275 (2013) on the TVA; Glaeser, Edward L., and Joshua D. Gottlieb, "The Economics of Place Making Policies," Brookings papers on economic activity 155 (2008) on the Appalachian Regional Commission; Boldrin, Michele, and Fabio Canova, "Inequality and convergence in Europe's regions: reconsidering European regional policies," 16 Economic policy 206 (2001) and Dall'Erba, Sandy, and Julie Le Gallo, "The impact of EU regional support on growth and employment," 57 Czech Journal of Economics and Finance 325 (2007) on the EU's cohesion policy; Garin, Andrew, "Putting America to Work, Where? The Limits of Infrastructure Construction as a Locally Targeted Employment Policy," (2017) on the ARRA's spending on infrastructure; Faggio, Giulia, and Henry Overman, "The effect of public sector employment on local labour markets," 79 Journal of urban economics 91 (2014) on increases in local government employment; Rubin, Barry M., and Craig M. Richards, "A transatlantic comparison of enterprise zone impacts: The British and American experience," 6 Economic Development Quarterly 431 (1992) on UK local tax incentives; Papke, Leslie E, "Tax policy and urban development: evidence from the Indiana enterprise zone program," 54 Journal of Public Economics 37 (1994), Bondonio, Daniele, and John Engberg, "Enterprise zones and local employment: evidence from the states' programs," 30 Regional Science and Urban Economics 519(2000) and Greenbaum, R., & Engberg, J. (2004). The Impact of State Enterprise Zones on Urban Manufacturing Establishments, 23 Journal of Policy Analysis and Management 315 (2004) on US enterprise zones; Neumark, David, and Jed Kolko, "Do enterprise zones create jobs? Evidence from California's enterprise zone program," 68 Journal of Urban Economics 1(2010) on California enterprise zones.

narrow.³¹ Specifically, it does nothing to address the fundamental problem of how people in the poor rural areas of the eastern heartland can find jobs that will enable them to qualify for the EITC, or perhaps even earn more than the EITC limit.³² Although it is possible that some of the EITC inures to the benefit of employers by enabling them to lower wages (thereby harming those employees not eligible for the EITC),³³ it seems implausible to suggest that the problem of creating good jobs in the poor areas can be solved by enabling employers to reduce wages even further, when many wages in those areas are at the minimum wage (and have to compete with much lower wages around the world).³⁴ Moreover, even if the EITC were to fully benefit employers rather than employees, it would not be more effective than the existing Work Opportunity Tax Credit available to employers, that has largely not been successful in creating good jobs in poor areas.³⁵

The reality is different: The good jobs are not there, and the question is how to get the good jobs to where the poor people are, not just (*pace* Schleicher) how to get the poor people to move to where the jobs are. Can tax policy help move the jobs? In the next three parts, we will discuss some past attempts to do so in the US and elsewhere, with mixed results.

2. A Tale of Three Tax Breaks: Sections 936, 199, and 250

There have been many attempts in the US to use corporate tax breaks to encourage certain types of economic activity.³⁶ This part will compare three of those tax breaks, while some others that were geared specifically to poor areas (i.e., the Work Opportunity Tax Credit and the Opportunity Zone program) will be discussed in part 5.

³¹ It is also very skeptical of both fiscal equalization and of using tax incentives to encourage investment in poor areas: "Perhaps there are settings where a Tennessee Valley Authority style "big push" may yield rich returns, but we are far from confident about economists' current ability to identify such opportunities. The general existence of agglomeration economies may support the case for national pro-investment policies, such as reducing taxes on capital gains, but unless we understand the spatial heterogeneity of agglomeration effects, the existence of agglomeration does not justify spatially heterogeneous polices." Austin et al.,19.

³² In 2019, taxpayers are eligible for the full EITC if they have annual earned income below \$8,650 (singles) to \$24,820 (married with three or more children). The EITC is a refundable credit worth between \$529 (single) and \$6,557 (married with three or more children). IRC section 32.

³³ See Jesse Rothstein, The Unintended Consequences of Encouraging Work: Tax Incidence and the EITC, CEPS Working Paper No. 165 May 2008, http://www.princeton.edu/gceps/workingpapers/165rothstein.pdf. ³⁴ See Rothstein, supra; Andrew Leigh, Who Benefits from the Earned Income Tax Credit? Incidence among Recipients, Coworkers and Firms, The B.E. Journal of Economic Analysis & Policy, Volume 10, Issue 1, ISSN (Online) 1935-1682, DOI: https://doi.org/10.2202/1935-1682.1994.

³⁵ IRC section 51, see discussion below.

³⁶ In general, such regulation via taxation is the main reason to have a corporate tax. See Avi-Yonah, *Corporations, Society and the State: A Defense of the Corporate Tax*, 90 Va. L. Rev. 1193 (2004).

a. Puerto Rico and IRC Section 936.

In 2016 Puerto Rico, a territory of the United States, was unable to pay its \$72 billion debt. Congress responded by placing Puerto Rico under a Financial Oversight Board and filing for municipal bankruptcy under Title III of the Puerto Rico Oversight Management and Economic Stability Act (PROMESA), which is similar to Chapter 9 of the US Bankruptcy Code (used for, e.g., Detroit).

Puerto Rico's bankruptcy was not inevitable. Until 1996, the Commonwealth benefited from Internal Revenue Code (IRC) section 936, which was originally enacted in 1921 and provided a tax incentive for US corporations that located operations in Puerto Rico. Specifically, section 936 (as modified in 1976) provided for a credit against US taxes paid on income derived from the active conduct of a trade or business in Puerto Rico. In 1982, section 936 was limited by taxing the US parent of a subsidiary in Puerto Rico on income from intangibles unless it had a significant business presence in the Commonwealth. The percentage of gross income that a Puerto Rican corporation must earn locally to qualify for the section 936 credit was set at 65% in 1976 and increased to 75% in 1986.³⁷

Even though section 936 applied to all US possessions, in practice its tax benefits were largely limited to Puerto Rico. In 2005, 98.8% of the \$900 million in tax credits claimed under section 936 derived from Puerto Rico, and 94 of 102 possessions corporations were located on the island. Manufacturing firms accounted for 69% of the section 936 credit in 2005.38

Even though there is an immense empirical literature demonstrating that tax incentives are effective in leading multinationals to shift the location of their activities,³⁹ section 936 came under criticism by two economists, Thomas Hexner and Glenn Jenkins, who argued that its job creating benefits were not large enough to justify the US loss of tax revenue.⁴⁰ Congress responded in 1996 by abolishing section 936, with a ten- year transition period that ended in 2006.

³⁹ See, e.g., Lars P. Feld and Jost Heckenmeyer, FDI and Taxation: A Meta-Study, 25 J. Econ. Studies 233 (2011).

³⁷ Daniel S. Holik, US Possessions Corporations 2005, Statistics of Income Bulletin 92 (2009).

³⁸ Holik, supra.

⁴⁰ Thomas Hexner and Glenn Jenkins, Puerto Rico and Section 936: A Costly Dependence, Tax Notes International 235 (Jan. 16, 1995). See also GAO, https://www.puertoricoreport.com/wp-content/uploads/2016/08/1992-May-Pharmaceutical-Industry-Tax-Benefits-of-Operating-in-Puerto-Rico-GAO-Report.pdf (1992).

Several economic studies have since re-evaluated the Hexner and Jenkins result. For example, Harry Grubert and Joel Slemrod investigated section 936 in 1998 and found by analyzing 419 possessions corporations that the operating capital and payroll of Puerto Rican affiliates would be more than two thirds lower in the absence of the section 936 credit.⁴¹ Grubert and Slemrod predicted that eliminating the tax exemption would result in many firms leaving the island or reducing the size of their operations, and this is in fact what happened after section 936 disappeared in 2006.42

More recently, Zadia Feliciano and Andrew Green used industry panel data to analyze the effects of the phase out and elimination of section 936 on the number of establishments, value added, employment, and wages in Puerto Rico's manufacturing sector. They show that the elimination of section 936 had the effect of decreasing average manufacturing wages by 16.7% and decreasing the number of manufacturing establishments by 18.7% to 28%.⁴³

By the fall of 2010, the government of Puerto Rico was desperately looking for revenue due to the deteriorating economic conditions caused by the repeal of section 936. The first author worked on a tax that was imposed on sales from Puerto Rico affiliates to their US parents and that (according to a ruling by the US Treasury) could be credited against US tax liability, thus partially re-creating section 936.44 But this levy was challenged in court and ultimately proved insufficient to prevent bankruptcy. 45

All the evidence thus suggests that contrary to Hexner and Jenkins, section 936 was an effective way of encouraging jobs and investment in Puerto Rico. and that its repeal was a catastrophic error that led directly to bankruptcy, a massive emigration, and a costly federal bailout.

More broadly, it could be argued that section 936 should have been terminated because otherwise it would be permanent, and we should not encourage permanent dependency. It is no accident that section 936 was eliminated in the same year that welfare reform terminated "welfare as we know it." Abut in our opinion this view is wrong. People are not just isolated individuals, but rather part of a community that has its own unique culture. 47 Migrating to a different place with a different culture has major costs, even if like most migrants you

⁴¹ Harry Grubert and Joel Slemrod, The Effect of Taxes on Investment and Income Shifting to Puerto Rico, 80 Review Econ. Statistics 365 (1998).

⁴² Grubert and Slemrod, supra: Feliciano and Green, infra.

⁴³ Zadia M. Feliciano and Andrew Green, US Multinationals in Puerto Rico and the Repeal of Section 936 Tax Exemption for US Corporations, NBER Working Paper 23681 (2017).

⁴⁴ IRS Notice 2011-29, https://www.irs.gov/pub/irs-drop/n-11-29.pdf.

⁴⁵ [cite constitutional challenge to PR tax].

⁴⁷ [cite on importance of community support for resiliency and quality of life, ISR data].

live surrounded by other migrants from the same place. ⁴⁸ Thus, we believe that preventing, for example, a mass migration from Puerto Rico to the mainland by maintaining jobs in Puerto Rico would have positive externalities for the people of Puerto Rico, who get to stay in a place they love, rather than move to a very different place. Moreover, the United States as a whole benefits as a nation from having different cultures in different places, and we would lose those benefits if the South, for example, lost most of its population to the coasts. We agree with Schleicher that people who want to move within the United States should be able to do so. But we also see the benefits of enabling the people who want to stay to do so, and that is fundamentally why section 936 should have been kept permanently, like similar place-based subsidies overseas (e.g., in China, Israel and Italy) that are discussed in part 4 below.

b. Section 199.

In 2004, the US lost the last of a long series of battles in the World Trade Organization (WTO) against the European Union (EU). Beginning in the 1970s, the EU challenged US export subsidies as incompatible with the WTO subsidies and countervailing measures (SCM) rules. The US lost successive cases on the Domestic International Sales Corporation (DISC), Foreign Sales Corporation (FSC) and Extraterritorial Income (ETI) regimes, all of whom were ruled to be illegal export subsidies.⁴⁹

Since the EU threatened sanctions on politically sensitive products such as Florida oranges in a presidential election year, Congress responded in 2004 by repealing the ETI regime and instead enacted section 199, which was designed to subsidize manufacturers who had benefited from ETI (such as Boeing) without violating the SCM, since section 199 was not tied to export performance.⁵⁰

In theory, section 199 was designed to help manufacturing, which could have helped the rust belt. However, the IRS issued regulations that expanded the definition of manufacturing to include writing software and producing movies. As a result, the benefits of section 199 mostly accrued in California and the Pacific Northwest, home to Microsoft and Disney.⁵¹ In addition, numerous corporate executives testified in Congress that section 199 did not

⁴⁹ For the history see Avi-Yonah, Reuven S. and Vallespinos, Martin, The Elephant Always Forgets: US Tax Reform and the WTO (January 28, 2018). U of Michigan Law & Econ Research Paper No. 18-006; U of Michigan Public Law Research Paper No. 596. Available at SSRN: https://ssrn.com/abstract=3113059 or http://dx.doi.org/10.2139/ssrn.3113059; Avi-Yonah, Does the United States Still Care About Complying with its WTO Obligations, Columbia J. Tax Law Tax Matters 12 (2018).

⁴⁸ [cite on costs of immigration].

⁵⁰ Under the SCM, a subsidy given to a particular enterprise or group of enterprises is an export subsidy, and therefore a prohibited subsidy, if it is linked de facto or de jure to export performance, and a remission of taxes otherwise due is a subsidy for this purpose. See Avi-Yonah and Slemrod.

⁵¹ Cite.

impact their investment decisions, and it was expensive (\$193 billion over the ten year budget window).52

Section 199 was repealed in 2017. It stands for the proposition that if Congress wants to encourage manufacturing, it should restrict the subsidy to real manufacturing, and ideally place geographical limits on the subsidy so it does not make the rich coasts even richer.

c. Section 250.

In lieu of section 199, Congress enacted the Foreign Derived Intangible Income provision (FDII, IRC section 250). Section 250 applies a reduced corporate tax rate of 13.125% (instead of 21%) to "foreign derived intangible" income" (FDII), which is defined as the amount which bears the same ratio to the corporation's "deemed intangible income" as its "foreign-derived deduction eligible income" bears to its "deduction eligible income."

Deemed intangible income is the excess of a domestic corporation's deduction eligible income (gross income without regard to certain enumerated categories) over a deemed 10% return on its cost basis in tangible assets.

FDII is defined as income derived in connection with (1) property that is sold by the taxpayer to any foreign person for a foreign use or (2) services to any foreign person or with respect to foreign property. In other words, this category comprises exports for property and services, including royalties from the licensing of intangibles.

Deduction eligible income is essentially the domestic corporation's modified gross income. So a U.S. company's foreign derived intangible income, which gets the 13.125% rate, is the amount that bears the same ratio to its deemed intangible income as the U.S. company's exports bear to its modified gross income.

The effect of this rule is that a US corporation that engages in exporting goods or services or intangibles has to pay 21% on the first 10% return on its tangible assets, but thereafter is entitled to the lower rate of 13.125%. "Export" for this purpose is defined broadly so it can include exporting items that have just been imported, as well as exporting items that will be reimported, as long as they have been modified in some way.

This provision is highly problematic in at least three ways. First, it discourages domestic manufacturing because it taxes tangible investments at

 $^{^{52}\} https://ways and \underline{means.house.gov/hearing-on-tax-reform-and-the-u-s-manufacturing-sector}\ (2012).$

21% up to a 10% return, while a domestic corporation that has no US activities and just imports goods and re-exports them benefits from the lower 13.125% rate.

Second, unlike section 199, section 250 is a blatant violation of the SCM, and will likely be struck down if challenged, because it is de jure as well as de facto contingent on export performance.⁵³

Third, perhaps because of concern it will be struck down, section 250 has not so far encouraged inbound FDI.⁵⁴ The reason may be that it is too risky to move intangibles into the US, because it may be a Hotel California situation ("you can check in, but you cannot check out") if the law is changed, and then the intangibles are trapped in the US because of the enhanced IRC 367 and 482.

Overall, FDII, like section 199, does nothing to help those areas of the US that need help, and is an expensive give-away to intangibles and exports, two areas that do not need help.

3. Amazon and the Sorry State of US State and Local Tax Incentives

While the federal government does little to encourage investment in the heartland, states and localities in the US have for several decades been engaged in massive tax competition. The most recent and most blatant illustration is the competition to attract Amazon's "second home", which is expected to create 50,000 jobs and bring in an investment of \$5 billion, as well as many positive externalities (e.g., the knowledge that Amazon employees take with them when they leave the retail giant). 238 localities applied to be considered, and Amazon chose the suburbs of Washington DC and New York City from a list of twenty finalists, all of whom offered it massive tax breaks. New York then withdrew its offer due to local opposition, resulting in Washington being the sole winner (which, given Jeff Bezos'

⁵³ Avi-Yonah, Reuven S. and Vallespinos, Martin, The Elephant Always Forgets: US Tax Reform and the WTO (January 28, 2018). U of Michigan Law & Econ Research Paper No. 18-006; U of Michigan Public Law Research Paper No. 596. Available at SSRN: https://ssrn.com/abstract=3113059 or http://dx.doi.org/10.2139/ssrn.3113059; Avi-Yonah, Does the United States Still Care About Complying with its WTO Obligations, Columbia J. Tax Law Tax Matters 12 (2018). For a contrary position see Sanchirico, Chris William, The New US Tax Preference for 'Foreign-Derived Intangible Income' (April 30, 2018). Tax Law Review, Vol. 71, No. 4, pp. 625-664 (2018); U of Penn, Inst. for Law & Econ Research Paper No. 18-7. Available at

SSRN: https://ssrn.com/abstract=3171091 or https://dx.doi.org/10.2139/ssrn.3171091.

⁵⁴ See: Foreign Direct Investment in the United States, Preliminary 1st Quarter 2018 (2018), https://ofii.org/report/foreign-direct-investment-in-the-united-states-preliminary-1st-quarter-2018 (last visited Aug 30, 2018).

ownership of the capital's leading newspaper and Amazon's increasing vulnerability to federal antitrust and regulatory enforcement, may strike some as a foreordained outcome).

The Amazon saga illustrates one problem with this type of tax competition: It confers a windfall on the multinational.⁵⁵ Amazon had decided to create the second headquarters and would have spent the \$5 billion and hired the 50,000 people somewhere in the US even if tax competition were banned. This is precisely why such tax competition is illegal in the EU (under the "state aid" doctrine, recently applied to Ireland's tax breaks for Apple and Luxembourg's for Starbucks), as well as a potential violation of the SCM (recently applied to the tax subsidies Chicago used to attract Boeing from Seattle).

However, from the perspective of the locality, tax competition can be effective. Spartanburg, SC benefited tremendously from attracting BMW, creating a hub for many other businesses, and so did Tuscaloosa, AL, when it attracted Daimler, even though the cost per job was quite high.⁵⁶ In other cases, however, it is harder to show that the benefits of tax competition exceed the costs, and none of these costs would have to be borne if there was an effective way to ban tax competition. Unlike the situation in China (described below) this seems unlikely, however, since the Supreme Court has rejected an effort to challenge local tax competition under the dormant Commerce Clause, and Congress seems unlikely to intervene.⁵⁷

The fundamental problem of relying on local tax competition to attract business to poorer areas is well illustrated by the Amazon case. Every single one of the twenty finalists on Amazon's list is either on the coasts, or if it is in the heartland, it is an already flourishing city (Nashville, Dallas, Austin, Pittsburgh and Columbus, OH, were the non-coastal finalists). These places may need Amazon to continue growing, but from a national perspective they are already doing well. What we need is a way to attract Amazon and its ilk to places that are not doing so well, as discussed in part 5 below.

4. Two Case Studies from Abroad: China and Israel

⁵⁵ See Avi-Yonah, Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State, 113 Harv. L. Rev. 1573 (2000).

⁵⁶ Cite HBS study on Daimler, BMW.

⁵⁷ DaimlerChrysler Corp. v. Cuno, 547 U.S. 332 (2006). On *Cuno* see Avi-Yonah, Passport to Toledo: *Cuno*, the World Trade Organization, and the European Court of Justice, 109 Tax Notes 1661 (December 26, 2005), 41 Tax Notes Int'l 289 (Jan. 23, 2006). For an argument that such state tax competition should be banned under the Commerce Clause see Peter D. Enrich, Saving the States from Themselves: Commerce Clause Constraints on State Tax Incentives for Business, 110 HARV. L. REV. 377 (1996). In China, as we discussed above, regional tax competition was banned by the central government because it promoted a race to the bottom, and Congress could do the same under the Commerce Clause, but is unlikely to do so.

Many countries have tried to use tax measures to attract investment to poorer regions to reduce regional economic disparities.⁵⁸ In this part we will survey two such attempts in non-federal countries, China and Israel, which had mixed results.

China and Israel are two very different countries- one is immense (about the same size as the US, but with four times the population) and the other tiny (the size of New Jersey, with 8 million people). But they have three things in common. First, they have very large regional disparities in development. In China the coastal regions are highly developed, with a per capita GDP of \$19,095 in Beijing, and \$18,450 in Shanghai, \$15,876 in Jiangsu, \$13,634 in Zhejiang, \$12,289 in Fujian, and \$12,010 in Guangdong, while the hinterland is poor, with a per capita GDP of \$4,343 in Gansu, \$5,117 in Yunnan, \$5,622 in Guizhou, and \$5,814 in Tibet. ⁵⁹ In Israel, the Tel Aviv region is rich (responsible for more than 50% of Israel's GDP, which was \$40,258 per capita for the year of 2017)⁶⁰ and the periphery is considerably poorer.⁶¹

Second, they are both highly centralized. Israel is not a federal country and local government depends on central government. China has provinces, but governance is highly centralized and major decisions are made in Beijing.⁶²

Third, neither country has a formal fiscal equalization mechanism. Instead, both rely on tax incentives to entice private investors away from the richer zones and into the poorer ones. In addition, Israel has a unique set of individual incentives. The first, in the form of tax incentives, is based on residency in the periphery, even if the taxpayer works in Tel Aviv. The second, in the form of special grants, is for skilled individuals working in periphery, regardless of their residency.

The main difference between the two sets of incentives relates to size: In Israel it is easy to live in the periphery and work in Tel Aviv, but that is not

⁵⁸ In addition to China and Israel, tax measures to aid development of poorer regions can be found in Italy...[add list].

^{59 &}lt;a href="https://zh.wikipedia.org/wiki/中国省级行政区人均地区生产总值列表#cite_note-gdppc2017-2">https://zh.wikipedia.org/wiki/中国省级行政区人均地区生产总值列表#cite_note-gdppc2017-2. According to World Bank national accounts data, and OECD National Accounts data files, the GDP per capita of China was \$8,117.267 in 2016, and \$8,826.994 in 2017. https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=CN

⁶⁰ See World Economic Outlook Database, April 2018, the International Monetary Fund (here)

⁶¹ The Israeli Central Bureau of Statistics (CBS) stopped publishing statistics regarding Israel's GDP, with geographical segmentation. An official publication from 2005 shows that Tel-Aviv region is responsible for roughly 37% of Israel's GDP, but later studies show that Tel-Aviv region is responsible for 54% of Israel's GDP. See Table 42 of Israel CBS publication for year 2005 (taking into account Tel-Aviv and Central districts, http://www.cbs.gov.il/publications09/manu05/pdf/tab42.pdf). See also here: https://www.globes.co.il/news/article.aspx?did=1000903288

possible in the hinterland of China, although (like the US) it is theoretically possible to live in the countryside and commute to cities in the hinterland.

The following description of the Chinese and Israeli tax incentives illustrates some of the possible options available for regional tax incentives in the US. Given the political unlikelihood of a US fiscal equalization program, such incentives are the most likely to succeed in creating a 21st century Marshall plan for those areas of the US left behind by globalization.

a. China

When China opened its economy in the 1980s, the coastal areas began to flourish first. This created a gap between the coast and the hinterland that the government saw as threatening the stability of the country, given China's long history of successive break ups. Consequently, in 2001 the central government launched the "develop the west" plan, followed in 2004 by a similar plan for the central provinces. These plans included tax reliefs but also massive government investment in infrastructure projects. 63

Under the original Great Western Development Strategy of 2001, there were two main forms of tax incentive available for investors in the hinterland.⁶⁴ First, a domestic or foreign enterprise investing in the hinterland could enjoy a reduced tax rate of 15% (compared to the general corporate tax rate of 25%) during the period from 2001 to 2010. Second, the newly established enterprises set up in the western region engaging in transportation, utilities, water conservancy projects, postal service and television broadcasting could enjoy a corporate income tax holiday (0% rate) for two years followed by three years at 12.5%.⁶⁵ These provisions were extended in 2011 for another ten years.⁶⁶

Between the early 2000 and 2013, growth in the interior soared, and the gap with the coasts was reduced. But since 2013, while the hinterland continued to grow, the coasts (especially the south) grew much more rapidly. From 2003 to 2013 the south coast share of national GDP fell from 36% to 33%, but since 2013 it has

⁶³ Ibid.

⁶⁴ Under Article 4 of the Notice No. 58 of 2011 (Caishui), the western regions having tax reliefs include 12 provincial-level administrative units: Chongqing, Sichuan, Guizhou, Yunnan, Xizang [Tibet], Shaanxi, Gansu, Ningxia, Qinghai, Xinjiang, Inner Mongolia, and Guangxi. Additionally, Xiangxi autonomous prefecture of Hunan Province, Enshi autonomous prefecture of Hubei Province and Yanbian autonomous prefecture of Jilin Province are also qualified to enjoy the same tax relief policies. These are all underdeveloped regions, mostly in western but some in northern and northeastern China.

⁶⁵http://www.mof.gov.cn/zhengwuxinxi/caizhengwengao/caizhengbuwengao2002/caizhengbuwengao2002/4/200805/t20080519_21081.html

 $[\]frac{66}{\text{http://www.chinatax.gov.cn/n}810341/n}810765/n}812156/n}812474/c1186395/content.html;\\ \frac{\text{http://www.chinatax.gov.cn/n}810341/n}810765/n}812151/n}812421/c1083733/content.html}.$

rebounded to nearly 35% in 2018. On the whole, the west and the center have stopped gaining on the coasts, although they are better off than they would have been without the tax incentives. In nominal terms, China's economic slowdown in 2009-2019 has been twice as sharp inland than along the coasts. Fiscal deficits in the coastal regions rose from 2% in 2000 to 3.9% in 2018, but in the hinterland they expanded rapidly from 5.5% in 2000 to 15.5% in 2018. This is in part due to a decline in direct government investment in the hinterland. In 2000 government investment was about a third of GDP in all regions, but it rose to 43% in the south coast, 68% in the west and 60% in the central region by 2018. For example, Chongqing, a city of over 30 million people in the west, grew by 17% in 2010 but only by 6% in 2018. In 2017, 87.5% of FDI into China flowed to the south coast. In western China, industrial activity fell from 51% of GDP in 2011 to 41% in 2018. But the government remains committed to trying to close the gap. 67

There are several reasons for the problematic outcomes of the Chinese strategy. First, before 2007 there were no limits on local and regional tax incentives, and local officials were compensated based on local GDP growth. The result was a proliferation of competing tax incentives that offset each other (like the similar situation at the state and local level in the US) and the natural geographic advantages of the coasts led to investors preferring them over the hinterland.⁶⁸ In 2007, China's Law on the Administration of Tax Collection was amended to bar subnational tax preferences, but existing regimes were grandfathered, resulting in a continuing advantage for the coasts.⁶⁹ Even when a tax relief expires, once a corporation has been doing business in certain location for a long time, it might be reluctant to move to another, poorer location with better tax reliefs but a less competitive infrastructure and workforce.

Second, the central government also extended similar tax reliefs to high tech industries in industrial development areas like Pudong district in Shanghai, thereby enabling them to outgrow the hinterland.⁷⁰

⁶⁷ Ibid.

⁶⁸ "Local officials preferred to broad powers in granting tax preferences and to outperform other local officials in competing for the investment, resulting in regional tax competition and disregard of centrally-made tax policy" Jinyan Li, The Rise and Fall of Chinese Tax Incentives an Implications for International Tax Debates, 8 Florida Tax Review 669 (2007).

⁶⁹ LATC, art. 3 (2007): The collection of tax or the cessation thereof, the reduction, exemption and refund of tax as well as the payment of tax dodged or overdue shall be implemented in accordance with the law or, if the State Council is authorized by the law to formulate relevant provisions, in accordance with the relevant provisions prescribed in administrative regulations formulated by the State Council. No governmental organs, entities or individuals may be permitted to make without authorization, by violating laws or administrative regulations, decisions regarding the collection of tax or the cessation thereof, the reduction, exemption or refund of tax, the payment of tax dodged or overdue or decisions in conflict with other tax laws or administrative regulations.

⁷⁰ In addition, to rejuvenate the old Northeast industrial bases in Heilongjiang, Jilin, and Liaoning, the SAT and Ministry issued Notice No. 153 of 2004 on Issues Concerning the Implementation of the Preferential Income Tax Policies on Revitalization of the Corporations in the Old Northeast Industrial Bases. http://www.chinatax.gov.cn/n810341/n810765/n812193/n812978/c1202111/content.html.

Third, despite the nominal ban on new unauthorized tax reliefs, these continue to exist at the subnational level. There is no uniform statute to recognize and govern regional tax reliefs, no coherent policy prioritization between regions and industries, and no serious legal liability against government officials for abusively granting tax reliefs to enterprises to meet local GDP targets tied to therir compensation. Although the LATC prohibits unauthorized regional tax reliefs, both obvious and hidden unauthorized regional tax reliefs exist in China. As the regional preferential policies take various forms of reduction, exemption or refund of tax, even the national tax administration does not necessarily have a clear picture of the actual scale, complexity, and geographical distribution of regional tax reliefs or subsidies in practice.

Nevertheless, the Chinese story is not one of complete failure. Between 2001 and 2013, there was a significant narrowing of the gap between the coasts and the hinterland, and even though precise data are lacking it is likely that some of this is due to government policies. Even after 2013, it is likely that absent the tax preferences the gap would have grown even wider. It is important to remember that overall since 1990 the proportion of people living in extreme poverty in China fell from 61% in 1990 to below 30% in 2002, and down to 4.2% in 2014. The number of citizens China has raised from poverty accounts for 70% of the world's total. Some of this happened in the hinterland. For example, Chinese government statistics indicate that regional tax reliefs have benefited the 219 national Economic and Technical Development Zones (ETDZs) in China, which in 2017 grew by 9.9%, or 3% higher than the overall national growth rate. Many

http://english.mofcom.gov.cn/article/newsrelease/press/201806/20180602754520.shtml; For the detailed list of NETDZs, please see:

http://www.mofcom.gov.cn/xglj/kaifaqu.shtml.

Although there is no independent assessment of the overall financial performance of ETDZs, Shanghai-based Tongji University released "The Bluebook of Sustainable Development of Chinese Industry Parks of 2017" in late 2017. According to the Bluebook, the 365 ETDZs realized 17.1 trillion yuan of GDP, representing 22.97% of the whole country's GDP, and paid tax revenue close to 3 trillion yuan, accounting for

⁷¹ Xiong Wei, Research on the Cleaning Up and Regulating Tax Incentive Policies from the Perspective of Rule of Law, 6 China legal Science (2014).

⁷²State Council Information Office, "China's Progress in Poverty Reduction and Human Rights", October 10, 2016. http://www.scio.gov.cn/zfbps/ndhf/34120/Document/1494400/1494400_1.htm

According to government data, in 2017, the 219 ETDZs realized the fiscal revenue of 1.8 trillion yuan, up 15.9% year on year, 8.5% higher than the average level of the country over the same period (7.4%), and accounting for 10.3% of the total government revenue; the realized tax revenue was 1.6 trillion yuan, up 12.2% year on year, 1.5% higher than the average level of the country over the same period (10.7%), accounting for 10.9% of the total national tax revenue. Regular Press Conference of the Ministry of Commerce, May 31, 2018.

of these are in the hinterland (for example, there are 88 in Sichuan).⁷⁴ Thus, it seems plausible that the Chinese hinterland benefited from the tax reliefs.

b. Israel

Regional tax benefits have been part of the Israeli tax system for many years. From the early days of its establishment, the need to embrace and encourage individuals to reside and develop rural areas in the small country was crucial to Israel's development and security. Tax benefits were used to incentivize those who chose to live in border towns and other areas that were commonly affected by the many wars with surrounding Arab countries in the north and south of Israel. In addition, the need to develop the Negev, a desert and semi-desert region of southern Israel, became a top priority to the first Israeli governments, and as such tax benefits were offered to companies that chose to invest there.⁷⁵ Finally, as a relatively small economy, surrounded by hostile countries, Israel's need to attract foreign investment was, and currently is, one of the most predominant goal of almost all of Israel's governments, which lead also to significant tax benefits to companies investing in Israel generally, and in designated areas, specifically. With its relatively short, but complex, history and a sharp and fast economic growth, Israel sets a great study case for an extensive, and many times politically controversial, use of tax benefits.

Generally, regional tax benefits offered in the Israeli Tax Code (ITC) can be divided into three main groups. The first is tax benefits for investment and production companies. Most significantly in this group are the benefits conferred by the Law on the Encouragement of Capital Investments (LECI), which will be discussed below. The main purpose of benefits in this group is to promote economic development in specific priority regions. The second is tax benefits per geographical location. Most notably are the tax benefits in the free trade zone of Eilat (Israel's southernmost city) and the two other free port zones in the cities of

25.31% of the total national tax revenue in 2016. http://tdi.tongji.edu.cn/News_show.asp?id=884.

⁷⁴ Xinhua New Agency, "Sichuan Vigorously Uses Tax Leverage to help Poverty Reduction", August 2, 2018. http://www.gov.cn/xinwen/2018-08/02/content_5311357.htm

⁷⁵ The obsession of Israel's founders with developing the Negev and the Israeli knowledge of Jewish sources is illustrated by the following joke: In the Bible, the prophet Elisha was mocked by children for being bald, and he responded by calling forth two female bears from the forest, who killed 42 children (2 Kings 2:23-25). The Talmudic sages were horrified by this story and responded by saying "neither bears nor forest", meaning the story was metaphorical, not real. When Israel's first prime minister David Ben Gurion announced on a visit to the arid Negev: "a forest will grow here!" someone in the audience replied, "and bears will walk in it."

Haifa and Ashdod. The third and last group is tax benefits for individuals residing in designated areas, set yearly by the government. The tax benefits conferred to individuals in this group reach not only income produced in, and arise from, activities in those areas, but also income earned by the individuals in other locations, as long as they reside in the priority areas.

LECI was first enacted in 1959 and was significantly revised in 2011 to focus more on technology, innovation and exports. Under the current version, LECI beneficiaries enjoy a preferred tax rate of 5% to 16% (instead of the regular corporate tax rate of 23%), as well as accelerated depreciation and a reduced withholding tax on dividend distributions. LECI applies to investment in Jerusalem and northern and southern Israel (the "periphery"). To Under the current version, LECI offers increased benefits to exporters and to large enterprises (e.g., the Intel factory in the south, which exports all of its products and employs over 5,000 people).

LECI has been subjected to significant critiques in Israel. Academic writing focuses on two main arguments. The first claims that encouraging exports should not be part of the fiscal policy of the Israeli Government, either by means of tax benefits or other incentives.⁷⁷ This argument is mainly based on broader economic policy considerations.⁷⁸ The second claims, by empirical studies, that the benefits conveyed by the law are not working as planned. For example, earlier researches showed that due to the fact that LECI changes rapidly, the law encourages projects with relatively "fast returns" (so the tax benefits could be used before the law changes). Those projects are usually more risky, conducted mainly by inexperienced investors without sufficient capital.⁷⁹ It should be noted, though, that LECI had been changed

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⁷⁶ The most favorable treatment is for investments in Zone A, which comprises the greater area of Jerusalem and certain parts of the North and the South of Israel. Zone A also includes the town of Ashkelon and other surrounding areas (many of which mainly inhabited by non-Jewish minorities). The greater area of Jerusalem has been designated as a favorable priority area mainly for knowledge-intensive by high-tech companies.

⁷⁷ See for example Assaf Zimring and Omer Moav, Does the Law on the Encouragement of Capital Investments Contribute to the Economy and the Society and does it achieve its declared goals?, Policy Paper, January 2016, Aharon Institute for Economic Policy, the Interdisciplinary Center Herzliya, at page 9 (in Hebrew). Available here: http://din-online.info/pdf/ah8.pdf

⁷⁸ *Id.*, at pages 10-12. This critique, however, is based on the standard economics argument that remitting taxes on exports can never increase them because of exchange rate adjustments, which has been shown to be empirically doubtful. See Avi-Yonah and Clausing, Problems with Destination-Based Corporate Taxes and the Ryan Blueprint, 8 Columbia J. Tax L. 229 (2017).

⁷⁹ See for example, Dafna Schwartz, Riv'on le-khalkalah.: Effective Incentive: the Law for Encouraging Capital Investment, Am Oved Publication, March 1985, at page 18 (in Hebrew).

since then, aiming to encourage mainly already established investors with substantial export activity. In any case, none of the main reviews criticize the goal of conveying tax benefits to companies investing in the periphery. Some researches show that the contribution of the benefits to the periphery is substantial.⁸⁰ Those research were mostly conducted before encouraging export activities became also a main goal of the LECI.⁸¹ On the other hand, other researches argues that there is no longer real need to encourage capital investment in the periphery of Israel,⁸² or that the influence of the LECI on the employment level of the periphery is not substantial (but this research does not predict what would happen to the population if LECI were abolished).⁸³

The problem with the latter studies is that they assume that the goal of LECI is to equate productivity in the center and the periphery, after which the subsidies can stop. Instead, the point of LECI is to prevent concentration of the population in the center, which is essential to Israel's security. Nor is it important that the jobs created by LECI in the periphery are mostly low-skilled ones (e.g., in the Intel factory in Kiryat Gat) and that high skilled workers commute from Tel Aviv. The point of LECI was and is to make it viable for people to live and work in the periphery, and none of the critical research disputes that this goal has been achieved.

Another argument is that LECI is an artificial subsidy and that if it were discontinued the investment in the periphery would cease. In our opinion, this is actually an argument in favor of LECI. One should think of living in the periphery as a market failure: Most of the population that lives there would rather live in Tel Aviv, but it is essential for the survival of the state that people continue to live in the periphery, and the residents of Tel Aviv derive a positive externality (by being more secure) from the fact that the

⁸⁰ See for example, Eliyahu Borukhov, Riv'on le-khalkalah: Industry in Development Towns — Problems of Development, Am Oved Publication, October 1989, at page 260 (in Hebrew).

⁸¹ For more details on the influence of this change, see Amos Olchvar, legislative proposal: the law of Encouragement of Capital Investments, 2004 – consequences of adding the export criteria on industries in the periphery, March 2005, The knesset – The Research and Information Center, at page 2 (in Hebrew). See here: https://www.knesset.gov.il/mmm/data/pdf/m01089.pdf

⁸² Guy Navon and Ronni Frish, The Effects of Israel's Encouragement of Capital Investments in Industry Law on Product, Employment, and Investment: an Empirical Analysis of Micro Data, the Research Department of Bank of Israel, November 2009, at page 34 (in Hebrew). See here: http://www.boi.org.il/deptdata/mehkar/papers/dp0912h.pdf

⁸³ See for example Moav and Riengverch, The Law for Encouragement of Capital Investments in Israel: the Employment Levels in the Periphery, 2006, Shalem College (in Hebrew).

population is not entirely centered in Tel Aviv. One does not hear the argument that Israel should stop providing defense for its citizens because they have become too dependent on the IDF. The periphery is a public good whose benefits cannot be entirely captured by the residents there, and that justifies the ongoing investment.

In addition, the first author can attest from personal experience that his home town of Jerusalem has been transformed by the high tech agglomeration in Har Hotzvim from a poor, sleepy town dependent on the government to a vibrant community capable of attracting secular Israelis. In addition to LECI, there were additional financial incentives offered by the government and the municipality (and the infrastructure and inexpensive labor force, primarily ultra-orthodox Jewish women, were already in place), but LECI had important role in this development.⁸⁴ The old joke about the best thing about Jerusalem being the road to Tel Aviv no longer applies for many young Israelis.⁸⁵

In addition to LECI, the Israeli government grants a wide variety of regional benefits to individuals who chose to either live or work in the periphery. Israeli residents residing in priority towns are entitled to several individual tax credits. For example, those individuals are entitled to 7% (and up to 12%) tax credit of their work compensation income. On the other hand, highly-skilled individuals (like medical doctors) working in the periphery are entitled to special grants, regardless of their residency. The effectiveness of these tax benefits is illustrated by the fact that all the kibbutzim (communal settlements) on the border with Gaza (where the second author grew up) have long wait lists of people who want to live there, despite repeated clashes with Hamas. These are not Zionist ideologues, but rather young families attracted by good education, single-family housing, and the tax breaks. Many of them commute to work in Tel Aviv.

5. A Proposal for US Regional Tax Relief

See, e.g., https://www.mako.co.il/travel-israel/jerusalem-50-years/Article-c6278ae86ee4c51006.htm.

⁸⁵ Although as a remnant of the past it is still true that Jerusalem is full of signs indicating the road to Tel Aviv, but there are no signs in Tel Aviv for the road to Jerusalem.

⁸⁶ Menachem Cohen, The Encyclopedia of Israeli Tax Law (**Cohen**), at chapter 5.3.2.2.

There are two issues that need to be resolved for any US regional tax relief proposal. The first is the geographic scope, and the second is what kind of tax incentive to provide.⁸⁷

a. Geographic Scope: Defining the Target.

As we have seen, China and Israel have very broad definitions of the areas that qualify for lower tax rates: The entire hinterland in China and the entire periphery in Israel. The same broad definition is applied for example in Italy, where the whole *Mezzogiorno*, or south, is entitled to tax breaks.⁸⁸

The problem with using the same broad approach in the US, i.e., defining the target area as the entire eastern heartland region (the area between the Mississippi and the eastern limit of the Appalachians, as suggested by Austin et al.) is that this definition is too broad and encompasses many flourishing cities (e.g., Chicago). A better option would be to build on an existing bipartisan consensus and use the definition of opportunity zones as enacted by the GOP in the 2017 tax law, which in turn builds on the New Markets tax credit proposed by Bill Clinton and enacted by Congress in 1996.⁸⁹ An opportunity zone is defined as a census tract that (a) has (i) at least 20% of its population with income below the poverty rate, or (ii) has a median family income not exceeding 80% of the statewide median (for rural tracts) or not exceeding 80% of the higher of city or statewide median (for city tracts), and (b) is designated as such by the governor of the state.⁹⁰

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⁸⁷ Tax incentives are of course not the only imaginable way of helping poorer regions. Beyond fiscal equalization, which seems politically implausible, one can imagine federal programs such as targeted assistance to community colleges, four-year colleges and universities, and vocational training programs in high-poverty areas, combined with infrastructure investment (broadband expansion, highway improvements, maybe high-speed railroads) in those areas. But help to education without local job creation is likely to result in more brain drain, and infrastructure by itself does not create long-term job opportunities, as the experience of China shows. The key to economic development of poorer regions is to create good jobs there. All else (education, infrastructure, housing) follows from the demands of the high skilled employees that are moved to those areas by private employers. Direct federal job creation (e.g., military bases) is an important contributor but does not usually result in growth like private job creation. Other federal programs that benefit poorer areas either do not help job creation (e.g., social safety net programs like Social Security, Medicare and Medicaid), create jobs primarily for migrants (e.g., agricultural subsidies) or create negative externalities (e.g., subsidies to the fossil industry). In general, tax incentives are sometimes superior to direct spending programs because they are more administratively efficient, and the IRS has long experience administering various forms of tax incentive programs. See Weisbach and Nussim, YLJ.

^{88 [}Cites].

⁸⁹ IRC sections 1400Z-1 and 1400Z-2; Notice 2018-48, 2018-28 IRC 9 (July 9, 2018). The opportunity zone concept was originally developed in a 2015 paper by Republican economist Kevin Hassett and Democratic economist Jared Bernstein. [Cite].

⁹⁰ IRC section 45D(e).

Opportunity zones have attracted significant attention by investors, but have also been widely criticized because (a) investments have been defined too generously to include types of investment that do not produce jobs, like real estate; (b) there are no limits to preclude opportunity zones being located in rich cities and near rich areas; (c) there are no limits to prevent gentrification that does not benefit the local population. For example, the NYC area where Amazon wanted to set up part of its second headquarters is an opportunity zone, as is an area in New Jersey where the Kushner family has extensive developments. Because of these problems, there was significant opposition in NYC (led by Rep. Alexandria Ocasio-Cortez) and Amazon abandoned its plans in favor of a Washington, DC suburb.

In order to address these problems, we would limit the target opportunity zones (a) to the area between the Mississippi and the Appalachians, where

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⁹¹ For explanations and critiques of current opportunity zones legislation see, e.g., Sheppard, Can Investment Funds Use Opportunity Zones? Tax Notes (May 13, 2019) ("most of the zone deals getting done are deals that would have been done without the tax benefits. Most are for multifamily housing, but not low-income housing, which has its own set of tax benefits. The Opportunity Zone benefits mean higher profits for developers and investors, and higher "promote" allocations for sponsors. All three groups share the tax benefits. Most participants see the social benefit as a positive feature of the program but irrelevant to investment decisions. Scott wants reporting, but participants see it as an administrative burden. There has been the inevitable whinging about gentrification and misspent tax subsidies"); Sage, Alan and Langen, Mike and Van de Minne, Alex, Where Is the Opportunity in Opportunity Zones? Early Indicators of the Opportunity Zone Program's Impact on Commercial Property Prices (May 1, 2019). Available at SSRN: https://ssrn.com/abstract=3385502 or http://dx.doi.org/10.2139/ssrn.3385502 ("In this study, we compare transaction prices of properties located in designated and eligible OZ census tracts, using a structural time series approach to estimate a hierarchical repeat sales price index. We find that OZ designation did not impact all properties prices, but resulted in a 14% price increase for "redevelopment" properties and a 20% price increase for vacant development sites. We do not find an expectation effect prior to designation. Our findings suggest that the OZ program has thus far primarily passed through the statutory tax benefits to existing land owners, with limited evidence of additional value creation."); Bloomberg, The Second Set of Proposed Opportunity Zone Regulations: Where Are We Now? (April 23, 2019); Maria Koklanaris, Opportunity Zone Investors May See More State Tax Windfalls, Law360 (May 1, 2019); Steven Hadjilogiou and Elizabeth Glasgow, Treasury Issues Proposed Regs on Opportunity Zones, The Estate Planner, May 1, 2019; Bloomberg News: Treasury Department Invites Abuse of Opportunity Zones(Opinion) (April 25, 2019); Olugbenga Ajilore, Center for American Progress: Treasury's Second Set of Guidelines for Opportunity Zones Still Leaves Struggling Communities Behind (April 25, 2019); Misha Hill and Lorena Roque, So-Called Opportunity Zones Provide Opportunity for Whom? (ITEP, April 23, 2019); Zhang, Libin, Clearing the Air About Marijuana in Qualified Opportunity Zones (April 3, 2019). 35 Tax Management Real Estate Journal No. 4 (2019). Available at SSRN: https://ssrn.com/abstract=3355794; Amy Rosen, New Rules May Spark Investment In Opportunity Zone Cos. (April 19, 2019); https://www.law360.com/articles/1150878/irs-proposes-relaxing-opportunityzone-rules-for-investors; https://www.politico.com/agenda/story/2018/11/20/opportunity-zones-republicantax-law-000789; Hilary Gelfond and Adam Looney, Learning from Opportunity Zones: How to improve place-based policies (2018); https://www.urban.org/policy-centers/metropolitan-housing-and-communitiespolicy-center/projects/opportunity-zones-maximizing-return-public-investment; David Kahen, Opportunity Zones: Basis and Other Issues, Tax Club paper (September 17, 2018). 92 https://www.bloomberg.com/news/articles/2019-02-15/amazon-may-get-tax-break-for-poor-with-project-

in-richest-county; https://www.bloomberg.com/news/features/2018-12-06/kushners-new-jersey-buying-spree-eligible-for-trump-tax-perks;

the problems are most acute⁹³; (b) to rural areas that have been losing population⁹⁴; and (c) requiring that the employees that qualify for the tax incentive described below (individually or for their employer) would have to be residents of the opportunity zone, as is already the case for the Work Opportunity Tax Credit (WOTC).⁹⁵

We are aware that this limitation excludes many worthy communities on the coasts and the western heartland, as well as poor areas within cities in the eastern heartland. However, we would like to focus the proposal on the area where the data reported above indicates the most widespread problems, and there are many other proposals directed at helping poor areas within cities that are differently structured and therefore less prone to gentrification issues.⁹⁶

b. Tax incentive.

Currently, the tax incentive offered by opportunity zones is rather limited. An investor who has unrealized appreciation in capital assets can invest his gain in a project in an opportunity zone approved by a nonprofit, and if she waits long enough, she can defer the original gain and exempt any further gain from capital gain taxation.⁹⁷

To address the gap between the coasts and the heartland, something more radical is needed. Specifically, we need to create an incentive for large employers to move jobs to the targeted opportunity zones.

The obvious kind of tax incentive would be some kind of jobs tax credit, like the current WOTC, but to a larger extent. The WOTC is currently available for wages paid by employers who hire individuals (on or before the end of 2019) from certain targeted groups. The credit for a tax year equals 40% (or 25% in case of wages attributable to individuals meeting only minimum employment levels) of qualified first-year wages. The credit has limited application mainly due to the fact that the qualified first-year wages are

⁹⁴ A rural renewal county means any county which (i) is outside a metropolitan statistical area (defined as such by the Office of Management and Budget), and (ii) during the 5-year periods 1990 through 1994 and 1995 through 1999 had a net population loss. Section 51(d)(5)(C).

⁹³ Glaser et al., supra.

⁹⁵ IRC section 51. Targeted groups include an individual who, on the date of hiring is at least 18 years old and under 40, resides within an Empowerment zone, an Enterprise community or a renewal community, and continues to reside at the locations after employment.

⁹⁶ [cite Elizabeth Warren plan, Mersa Bharadaran].

⁹⁷ The focus on individual investors flows from a wish to emphasize entrepreneurship and not induce corporate migrations from other areas, but it seems unlikely to jump start an area by itself. Silicon Valley is hard to re-create. In Jerusalem, for example, the high tech area began by attracting the Intel R&D facility, and the start-ups followed.

⁹⁸ IRC section 51.

generally limited to only the first \$6,000 paid to each member of the targeted group during her first year of employment.⁹⁹ Generally, an individual is a member of a targeted group if she, among other, is a designated community resident.¹⁰⁰ Interestingly, a designated community resident means any individual who, among others, has her principal place of abode within an empowerment zone, enterprise community, renewal community, or rural renewal county.¹⁰¹ The individual must continue to reside in those areas in order for wages to qualify for the credit for his or her employer. A rural renewal county means any county which (i) is outside a metropolitan statistical area (defined as such by the Office of Management and Budget), and (ii) during the 5-year periods 1990 through 1994 and 1995 through 1999 had a net population loss.¹⁰²An empirical study on the WOTC showed that it has positive effects on targeted groups in terms of employment levels, but does not necessarily help in increasing wages in the long run (although the research did find positive effects on wages increases for the short run).¹⁰³

One can imagine a much more generous jobs tax credit than WOTC. Under such a tax credit, for every dollar of wages paid by a corporation to an employee within the target zone, it would get a full dollar reduction in its corporate tax liability, instead of the deduction for paying the wage (which is only worth 21 cents for every dollar paid). The problem, however, is that this type of credit may not lead to new hires, but just to a move of some highly paid executives to the target zone, with limited benefit for the local community. Why? Explain Moreover, as illustrated below, the impact of such a credit on tax liability is significantly lower than our preferred alternative.

Instead, we would recommend adopting a formulary apportionment (FA) approach. An extensive economics literature has documented the effect of FA on location decisions by multinationals. As Charles McLure pointed out, the traditional US state formula of allocating corporate profits based on the location of tangible assets, payroll and sales operates in practice like three taxes on the three elements of the formula, and creates an incentive for the multinational to move jobs and assets to low tax jurisdictions. This is

⁹⁹ See section 51(b)(2)(i). The wages limitations is set to \$3,000 (instead of \$6,000) for qualified summer youth employees and to 25% (instead of 40%) in case of wages attributable to individuals meeting only minimum employment levels.

¹⁰⁰ Section 51(d)(1)(D).

¹⁰¹ Section 51(d)(5)(A) and (B).

¹⁰² Section 51(d)(5)(C).

¹⁰³ Sarah Hamersma, The effects of an employer subsidy on employment outcomes: A study of the work opportunity and welfare-to-work tax credits, Journal of Policy Analysis and Management, Vol. 27(3) Summer 2008, at page 518. See here: https://onlinelibrary.wiley.com/doi/epdf/10.1002/pam.20354

¹⁰⁴ McLure, Charles E., Jr., "The State Corporate Income Tax: Lambs in Wolves' Clothing"

in The Economics of Taxation, Henry S. Aaron and Michael J. Boskin (eds.),

generally viewed as a negative aspect of traditional FA because it leads to job losses, which is why the first author has proposed repeatedly that the US adopt an FA based on sales, which are harder to manipulate because consumers are relatively immobile.¹⁰⁵

In the present context, however, we would like to incentivize multinationals to move jobs to the low-tax! target zone. Therefore, we would propose to apportion world-wide corporate profit between the target zone and the rest of the world by using the following formula:

Total profit x (number of employees in target zone/total employees + wages in target zone/total wages)/2=profit in target zone

This formula differs from the traditional state formula in that it ignores sales and tangible assets, because we want to focus on jobs in the target zone. The averaging of wages and number of employees is based on the political compromise reached in the EU between the rich states use countries—states gets confused because you're discussing EU in US context (who want wages because their wage rate is higher) and the poorer states (who want number of employees because they have larger labor forces). The idea is to prevent Amazon from apportioning a lot of income to the target zone just by moving Jeff Bezos there. The idea is to prevent a lot of income to the target zone just by moving Jeff Bezos there.

From a development perspective, it does not matter (and may even be better) if the multinational does not hire locally but moves highly trained people into the target zone from other, richer locations. The whole idea is to create an incentive for people to move to the poorer places, not away from them. Once people move to a place with jobs and salaries, they demand housing, and once they have housing, they demand good schools, good infrastructure, and the other amenities they had where they came from. Gradually, the poor area becomes more like the richer areas. This is what

Washington, DC: The Brookings Institution (1980). See also Kimberly A. Clausing, THE U.S. STATE EXPERIENCE UNDER FORMULARY APPORTIONMENT: ARE THERE LESSONS FOR INTERNATIONAL REFORM? 69 National Tax Journal 353 (2016).

¹⁰⁵ Avi-Yonah, Allocating Business Profits for Tax Purposes: A Proposal to Adopt a Formulary Profit Split, 9 Fla. Tax Rev. 497 (2009) (with K. Clausing and M. Durst); Avi-Yonah, The Rise and Fall of Arm's Length: A Study in the Evolution of U.S. International Taxation, 15 Virginia Tax Rev. 89 (1995); Avi-Yonah, Slicing the Shadow: A Proposal for Updating U.S. International Taxation, 56 Tax Notes 1511 (March 15, 1993).

 $^{^{106}}$ For the proposed EU formula see https://ec.europa.eu/taxation_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb_en.

 $^{^{107}}$ In addition, there needs to be a minimum number of employees (e.g., 500) to prevent a billionaire from setting up a corporation with himself as the sole employee, pay himself a small wage, and live and work in the opportunity zone. If the corporation earned \$1 billion and his wage was \$100,000 (like Warren Buffett) and he was the sole employee, all of the corporate profits would be exempt from tax. \$1 billion * [(100,000/100,000 + 1/1)]/2 = \$1 billion.

happened in Spartanburg, SC and in Tuscaloosa, AL, when they attracted BMW and Daimler respectively.

The tax rate on profits apportioned to the target zone should be significantly lower than the tax rates on other profits. Currently, the tax rate on domestic profits is 21% and on foreign profits 10.5%, but the latter could be zero if actual jobs are moved overseas. 108 Because of this, we recommend a corporate tax rate of zero on profits from the target zone, and would be willing to forego a large part of US corporate tax revenues to achieve the needed job growth in the target zone.

The following example illustrates how such a formulary apportionment method would work and why it is more effective than a jobs tax credit:

Assume a multinational that makes \$1 billion in worldwide profits, pays \$100 million in wages worldwide, and (for simplicity) has no other deductions. The multinational has 10,000 employees worldwide, out of whom 5,000 work in the target zone. It pays the employees in the target zone \$20 million in wages.

Under current law, the multinational would pay \$189 million in tax:109

Gross income 1 billion - 100 million=900 million x 21%= 189 million tax

Under a jobs tax credit, the multinational would pay \$173.2 million in tax:

Gross income 1 billion - 80 million = 920 million x 21% = 193.2 million tax - 20 million credit = 173.2 million tax

Under our proposed FA, the multinational would pay \$122.85 million in tax:

Gross income 1 billion - 100 million = 900 million
In target zone: number of employees factor 5000/10,000=50%
Wages factor 20/100=20%
Average of the two factors 50+20/2=35%
900x35%=315 million taxed at 0
900x65%=585 million taxed at 21%=122.85 tax

Thus:

¹⁰⁸ See Avi-Yonah, Guilty as Charged: Reflections on TRA17, 157 Tax Notes 1131 (Nov. 20, 2017)

¹⁰⁹ For simplicity, we ignore the fact that the multinational may pay only 10.5% or less on its foreign profit. The incentive under the Tax Cuts and Jobs Act to move jobs overseas and pay 0% on the profit should be abolished. See Avi-Yonah, Guilty as Charged: Reflections on TRA17, 157 Tax Notes 1131 (Nov. 20, 2017).

Net income (after deductions and tax) under current tax is 1,000-100-189=\$711 million.

Net income under tax credit is 1,000-100-173.2=\$726.8 million.

Net income under FA is 1000-100-122.85=\$777.15 million.

The effective average tax rate on net income under current tax is 21%, under the tax credit 19.2%, and under FA 13.65%.¹¹⁰

The advantage of the FA system is that the more employees you hire in the target zone, the lower your taxes, especially if you also pay them higher wages (in the example, the average wage in the target zone is lower, which is probably realistic at first). But this benefit only lasts as long as you maintain employment in the target zone.

In addition, we would recommend a lower individual tax rate applying to people who move to the target zone, even if they work elsewhere. This proved very effective in Israel, and given the size of the US, for most people work will tend to be close to home.

6. Conclusion: Towards an Imperfect Union

The outcome of the 2016 presidential election came as a shock to many Americans in heavily Democratic areas, who could not imagine that their fellow citizens would vote for somebody like Donald Trump. It revealed an immense gap between the well-educated winners from globalization, who tended to congregate on the rich coasts even if they were born elsewhere, and the poorly-educated losers, who tended to live in the heartland where their parents and grandparents had lived before them.¹¹¹

The inequality that is ripping the country apart is not just class-based. It is also spatial. If we are to maintain the ethos of "e pluribus unum" and sustain the ideal of a country united not by blood but by creed, we need to find a way to close this gap, or at least reduce its size. It cannot be that the coasts flourish and the heartland withers, because the heartland will find a way to strike back. There is already a significant gap in culture as well as education

¹¹⁰ If the multinational employs more skilled labor at higher wages in the target zone, the result is even better, even with fewer employees in the target zone: Assume 1000M worldwide income, 100M worldwide of wage deduction, \$45M in target zone (45%), and 10K worldwide employees, 3K in target zone (30%). With a Job Credit you get Taxable income: 1000-55=945M, Tax Liability: 945*21%=198.45M, Credit: \$45M, Final tax liability: 153.45M, and Net Income: 846.55M. With FA, you get Taxable income: 1000-100=900M, Calculation of target apportionment factor (45%*1/2)+(30%*1/2)=37.5%, Total income in target: 900* 37.5%=337.5M, Rest of income: 900-337.5=562.5M, Tax on target income: 337.5*0%=0, Tax on rest of income: 562.5 *21%=118.125M, Final tax liability: 118.125M, Net Income: 881.875M, effective average tax rate 13.125%.

^{111 [}cite analysis of 2016 results by education level and urban/rural].

between the coasts and the heartland. But if the economic disparity could be reduced, this gap need not translate into political enmity. As long as we believe in the same American Dream, our cultural differences need not drive us apart.

In every other large federal country, the risk of secession drives fiscal equalization. In the US, secession led to civil war, and is relative implausible—resulting in a situation where it cannot provide political impetus for fiscal equalization. Thus, fiscal equalization remains controversial and politically unlikely. But there are steps well short of fiscal equalization that can incentivize private actors to invest in the heartland. As the adoption of opportunity zone legislation in 2017 shows, such steps can and should be adopted on a bipartisan basis.

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