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RESEARCH NOTE

#PARG 2022-14RN

The Likely Impacts of the Regional Opportunities Investments Tax Credit (ROITC)

Effects of Place-Based Investment Tax Incentives

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In its 2020 budget, the Ontario government introduced the Regional Opportunities Investment Tax Credit (ROITC). The ROITC is a corporate income tax credit for investments in commercial and industrial buildings in regions that experienced below average employment growth between 2009 and 2019. Essentially, the ROITC reduces the provincial tax liability for corporations that make qualifying investments in Northern, Eastern, and Southwestern Ontario. The ROITC was announced several months after the government pledged to explore "ways to encourage investment into rural and undercapitalized areas of the province" through means such as "potential changes to the tax system (Ontario 2019, 50). Place-based tax incentives are widely used by governments seeking to encourage economic activity in less prosperous regions; however, the effectiveness of these incentives is questionable.

This study analyzes the likely impacts of the ROITC. It explores, first, whether place-based investment tax incentives like the ROITC are generally effective at promoting economic development in targeted regions and, second, how the impacts of the ROITC are likely to vary between Northern, Eastern, and Southwestern Ontario. This note is part of a sequence of three research notes. The first note sets the context for the series by discussing how the ROITC works, the extent of regional economic disparities in Ontario, and theories of regional economic divergence. This note uses literature and data regarding previous place-based investment tax incentives to determine the usual impacts of such policies. The final note will draw on the first two notes to explain how the impacts of the ROITC are likely to vary between Northern, Eastern, and Southwestern Ontario.

Introduction

The idea of offering tax incentives for investing in less prosperous areas is not new. Consequently, the results of previous programs can be used to assess whether place-based investment tax incentives like the ROITC are generally effective at promoting economic development in targeted regions. This note will discuss three case studies of programs similar in design to the ROITC. One case study is Canadian; the others are from Italy and the United States, two other highly industrialized economies with above average regional economic inequality (IMF 2019). This note will also discuss pertinent findings from the experiences of other place-based tax incentives.

Desired Outcomes of Place-Based Investment Tax Incentives

Before delving into case studies, it is important to establish what we want place-based investment tax incentives to accomplish. Clearly, the immediate objective should be to attract investment. Place-based incentives are not, however, created with the aim of attracting investment for its own sake. The primary objective of such programs is to benefit people living in the targeted regions. Generating benefits for the province or country as a whole by allowing its constituent regions to prosper is perhaps a secondary objective. Creating jobs and raising locals' incomes are often identified as the ultimate desired outcome of place-based incentives (Daly et al. 1993; Pew Charitable Trusts 2021). Increased employment and incomes are not the only potential benefits of these programs; a stronger local tax base, for instance, can also help a disadvantaged region. As with any economic policy, success should be determined by comparing benefits to costs. Therefore, the appropriate metric for assessing a program are the jobs, income, and other benefits created relative to the cost of the subsidy.

Case studies

Cape Breton Investment Tax Credit

The analysis of the Cape Breton Investment Tax Credit (CBITC) conducted by Daly et al. (1993) represents the best evidence available regarding the investment and employment generated by a place-based investment tax incentive in Canada. The CBITC was introduced in 1985 and was applicable to investments made before 1993. At that time, Cape Breton was an especially disadvantaged area of a larger Atlantic region that suffered from poor economic performance relative to the rest of Canada. The CBITC was exceptionally generous. It offered a 60 percent federal corporate income tax credit on new investments in buildings, machinery, and equipment used in manufacturing, farming, logging, natural resources, and some service-related activities.

Through interviewing firms' management and obtaining other business information concerning approximately two-thirds of investments that benefited from the CBITC, Daly et al. (1993, 563) determined whether these investments would have proceeded in the CBITC's absence and identified any alternative projects that would have been undertaken instead. This research yielded credible estimates of tax revenue foregone due to the tax credit, and of jobs and income generated by the credit. Since manufacturing accounted

for two-thirds of CBITC-eligible investments, Daly et al. focused on this industry in their analysis. They estimate that the CBITC created 422 manufacturing jobs. Crucially, however, they estimate that the annual cost of the subsidy provided through the CBITC per job created was 50 percent greater than the average annual manufacturing wage in Cape Breton at the time (Daly et al. 1993, 570-571). This suggests that the cost of the CBITC exceeded its benefits. Granted, given that the CBITC created more than 400 jobs in Cape Breton, it is likely that the program delivered some additional, indirect economic benefits to the region; for example, through increased consumer spending by individuals who gained jobs. But estimates are not available regarding the magnitude of this "investment multiplier".

Italian Law 388/2000 Program

Italy's Law 388/2000 established a regional investment tax credit program in the country. An initially generous version of the program operated from 2000 to 2002. From 2003 onwards, the program was repeatedly downsized and modified in response to fiscal pressures (Caimui 2011, 17). Under Law 388/2000, companies that made investments in less prosperous regions of Italy received a tax credit. Nearly all capital investments were eligible for the credit (Bronzini et al. 2008, 5). Notably, corporations received larger tax credits for investing in more disadvantaged regions. Under the initial program, an investment in the poorest regions of Southern Italy was rewarded with a credit of up to 60 percent, while investments made in moderately disadvantaged areas in Northern Italy received a maximum credit of 18 percent (Bronzini et al. 2008, 21).

The design of this program created a scenario in which there are both subsidized and non-subsidized firms located in eligible areas, firms located in non-eligible areas, and firms that receive different levels of subsidy. Researchers have exploited this arrangement to analyze the program's impacts. Bronzini et al. (2008, 11-13) find that as firms received larger tax credits, they pursued larger increases in investment relative to pre-Law 388/2000 baselines. The estimated total increase in investment was roughly equal to the fiscal cost of the program, a positive sign for cost-benefit purposes. Compared to Bronzini et al., Caimui (2011) has less favourable conclusions regarding the program. Caimui (2011, 36) estimates that each dollar in tax credits stimulated only 0.86 dollars in additional investment.

Additionally, Caimui more fully investigates the possibility of *time substitution of investment*; that is, firms delaying or advancing the timing of investments so that they can benefit from a tax credit. They (2011, 36-38) suggest that as much as half of the additional investment that occurred after the passing of Law 388/2000 was not truly new investment triggered by the credit; rather, these investments would have occurred anyway, and firms simply re-scheduled them to benefit from the tax credit. In sum, it is unlikely that the dollar value in investments generated by the tax credit exceeded the cost of the program. Neither Bronzini et al. nor Caimui investigate the effects of the Law 388/2000 program on employment. Considering the program's limited success in generating additional investment, it is unlikely that these tax credits created many jobs relative to their fiscal cost.

Opportunity Zones (United States)

The Opportunity Zones program was introduced in the United States in 2017. Through this program, individuals can defer taxes on realized capital gains by re-investing these gains in "Qualified Opportunity Funds" that must hold at least 90 percent of their assets in designated low-income census tracts called "Opportunity Zones". Individuals who hold their investment in a fund for five years can omit 10 percent of the original capital gain from taxes, and all gains are tax free if the investment is held for at least 10 years (Council of Economic Advisers 2020, 3). The Opportunity Zones program is a capital tax credit like the ROITC, it simply applies to taxes on capital gains rather than corporate income.

In 2020, the Council of Economic Advisers (CEA) offered an initial assessment of the impact of Opportunity Zones (OZs). The CEA conducted its assessment through coupling the latest data with findings from economic literature. The CEA estimates that $75 billion of capital was invested in Qualified Opportunity Funds by 2020. Of this sum, $22.8 billion would have occurred in OZs without the incentive and another $24.9 billion was shifted from elsewhere in the United States (2020, 27). The CEA (2020, 1-2) estimates that this investment could reduce poverty in OZs by up to 11 percent and create $11 billion in wealth for the 47 percent of OZ residents who own their own homes through increasing property values.

According to further estimates, the program has generated $4.66 in new investment for every dollar in foregone capital gains tax revenue, while the fiscal savings from lifting OZ residents out of poverty and thus off entitlement programs could make the program revenue-neutral (CEA 2020, 27). Other research on the impacts of OZs, however, suggests that benefits could be more limited. Atkins et al. (2021), for instance, compared the number of job postings in OZs to the number of job postings in otherwise similar census tracts that lacked OZ designation. They found some evidence of increased job postings in urban areas, areas with large Black populations, and in certain states, but no evidence of an overall increase.

Regardless of the precise extent of employment growth and poverty reduction, the OZ program does appear to deliver tangible benefits at a lower cost relative to other place-based incentives discussed in this note. This might be explained by that fact that the OZ program targets capital gains taxes instead of corporate income taxes. Capital gains taxes are among the most distortionary forms of taxes. A report commissioned by the Canadian Department of Finance estimates that each $1 reduction in corporate income tax revenue would produce a social welfare gain of $0.37, while each $1 reduction in revenue from personal capital incomes taxes, such as capital gains taxes, would produce a social welfare gain of $1.30 (Baylor and Beausejour 2004, 16).

Analysis of case studies

From the case studies discussed, some conclusions can be reached regarding the likely impacts of the ROITC. First, the ROITC will likely generate additional investment and employment in the targeted regions. In all three case studies, the presence of a tax incentive increased investment in economically disadvantaged areas. The Canadian

scheme most similar to the ROITC, the Cape Breton Investment Tax Credit, succeeded in creating many jobs. Nevertheless, the literature suggests that the ROITC is unlikely to represent a cost-effective regional development instrument. The levels of new investment and employment income generated by the CBITC and the Italian Law 388/2000 program did not offset foregone tax revenue. The ROITC is likely to provide some indirect benefits such as appreciation of property values as well as additional job creation as workers who benefit from subsidized investments spend money in the local economy, but these benefits may be insufficient to close the cost-benefit gap.

The theories of regional economic divergence discussed in the previous research note in can assist in the interpretation of these findings. One investment tax incentive program cannot be expected to transform the regional economic order in Ontario, but for the ROITC to be effective, it must promote regional convergence to at least some extent. The results of the three case studies suggest that place-based investment tax incentives strengthen centrifugal forces, albeit to a limited extent.

The previous note highlights three potential avenues for economic development in peripheral regions that rely on strengthening centrifugal forces identified by Krugman (1998). Place-based investment tax incentives promote one of these avenues: enhancing the cost advantage that peripheral regions hold over their more developed, core counterparts. An investment tax incentive acts as a centrifugal force by reducing the cost of acquiring and developing property. The literature presented concerning Opportunity Zones confirms that place-based investment tax incentives can draw investment away from more prosperous regions; one-third of capital invested in Qualified Opportunity Funds was redirected from elsewhere in the United States (CEA 2020, 27).

Place-based incentives strengthen another centrifugal force: the presence of an immobile factor in peripheral regions; specifically, people. Credits like the CBITC and the Law 388/2000 program increased employment in targeted regions. All else being equal, when a tax incentive creates additional jobs in a peripheral region, more people will live and spend money in said region. This results in larger consumer and labour markets in the periphery that should lead some additional economic activity to relocate from the core. When citing people as an immobile factor, Krugman (1998, 8) was referencing an international context in which people cannot always freely move between countries. But people are not entirely mobile in the domestic context either as social, lifestyle, and other factors can make some individuals reluctant to move from one region to another. To the extent that jobs created by place-based investment tax credits lead more people to live in peripheral regions, these jobs represent a centrifugal force.

Coupling results of another case study with economic theory can help explain why the benefits provided by place-based incentives are limited. Caimui (2011, 43-44) observes that firms that received tax credits through the Law 388/2000 program experienced improved productivity, with low-productivity firms in especially disadvantaged areas benefiting the most. Caimui argues that this assistance has probably helped low-productivity firms improve their competitive position in the local markets of disadvantaged regions, but is not substantial enough to allow these firms to compete with rivals from more prosperous regions. These observations align with Porter's (1998) explanation of

why, in the modern global economy, the most productive firms are found in industry-specific clusters. Informed by cluster theory, we can hypothesize that while capital tax credits can boost the productivity of firms located outside of clusters, cheap capital cannot replace the network benefits of a cluster. If true, this claim would bolster the thesis that place-based investment tax incentives cannot propel a disadvantaged periphery region to the development level of more prosperous regions. If firms in peripheral regions remain unable to compete with firms in core regions, then peripheral regions are unlikely displace the core as industrial hubs.

In short, the evidence presented in the three case studies suggests that place-based investment tax incentives increase investment and employment in targeted regions. These incentives strengthen the cost advantage enjoyed by peripheral regions and increase the presence of immobile factors of production. Therefore, these incentives do promote economic development in targeted regions. Nevertheless, the evidence also suggests that these incentives are not cost-effective policies for promoting regional development as their economic benefits rarely exceed their fiscal costs.

Which areas benefit most from place-based incentives?

Another important question concerning place-based investment tax incentives is which places they tend to benefit most. On this question, existing literature offers two insights. First, a tax credit for capital investment, such as the ROITC, can be expected to disproportionately benefit regions with more capital-intensive business sectors. Hanson and Rohlin (2011) show that a wage tax credit – i.e., a credit for labour – in the United States disproportionately benefits firms in labour-intensive industries like retail. These credits reduce the cost of labour, which is most beneficial to firms that use lots of labour (Hanson and Rohlin 2011, 200). This suggests that the inverse is also true: a credit for capital should disproportionately benefit firms in capital-intensive industries. Moreover, in their study on how the New Markets Tax Credit affects the sorting of industry, Harger and Ross (2016) find that firms primarily use tax credits for capital investment to fund expansions to existing plants and buildings, rather than to build new ones. This trend is especially strong under time-limited programs – which the ROITC is currently. Given that capital tax credits disproportionately benefit capital-intensive industries and that these credits are primarily used to expand existing properties, capital tax credits can be expected to disproportionately benefit regions that currently have more capital-intensive business sectors.

Second, if an identical tax credit is available for regions experiencing varying degrees of economic disadvantage – which is the case for the ROITC – a disproportionately large share of investment will likely be made in the least disadvantaged eligible areas. All else being equal, the least disadvantaged eligible areas should offer the highest returns on investment. And if investors can receive the same tax credit for investing in a moderately disadvantaged area and a severely disadvantaged area, they will often select the former. Pew Charitable Trusts (2021) explains that this trend has been observed across the United States, with many place-based incentives failing to deliver benefits to the poorest communities. Tax credits introduced in North Carolina in the 1990s illustrate the extent to which subsidized investments flow disproportionately to areas that are less

disadvantaged (Perez and Suher 2020). North Carolina counties were divided into three tiers according to local economic conditions, with more generous tax credits provided to firms that invested in more economically disadvantaged counties. Despite the tiered nature of the tax credit, most investment occurred in the least disadvantaged eligible counties (Perez and Suher 2020, 27).

Nevertheless, evidence from North Carolina suggests that offering larger subsidies to invest in more disadvantaged areas can redirect some investment to these areas. The extra subsidy for investing in the most disadvantaged areas was larger for a job creation credit than for other credits tied to investment in manufacturing and equipment and research and development. Through the job creation credit, 61% of subsidized investment occurred in the least disadvantaged counties. Through the two less differentiated credits, over 75% of investment occurred in the least disadvantaged counties (Perez and Suher 2020, 7).

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