New and Promising Ideas in the Productivity Field: Review Article on *Think Like an Enterprise: Why Nations Need Comprehensive Productivity Strategies* by Robert Atkinson

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ABSTRACT

The most interesting part of Robert Atkinson's (President of the Information Technology and Innovation Foundation (ITIF)) manifesto on productivity is his recommended productivity strategy for strengthening productivity growth. Atkinson concludes that so-called framework policies are necessary but far from sufficient. The more active public policy role he calls for would include measures to lower the price of capital, moral suasion of firms to think more strategically, more direct government involvement in developing and disseminating new technologies and facilitating interactions across firms and sectors. Many will share Atkinson's view that different approaches to enhancing productivity growth are in order given the modest productivity records of many countries of late. But it is troubling that Atkinson does not suggest more stringent tests for new policy interventions. They must be subject to benefit-cost analysis to determine whether there is a net social benefit. The experiences countries have had with elements of what Atkinson recommends must be studied to see if they have yielded productivity gains.

IN MAY 2016, Robert D. Atkinson, President of the Information Technology and Innovation Foundation (ITIF), a Washington-D.C.-based think tank, released a sweeping (183 pages including endnotes) manifesto on productivity entitled *Think Like an Enterprise: Why Nations Need Comprehensive Productivity Strategies*.[2]

The document covers considerable ground, including: the definition and importance of productivity; a condemnation of "neo-Keynesian" and " neo-classical" economists for their respective indifference to productivity and laissez-faire perspective on policy interventions; and a detailed prescription of comprehensive productivity strategies that should be implemented in most nations.

This review will be highly selective in that it will only focus on what appears to be new and promising in the manifesto. Anyone seeking a broad perspective on productivity, including its

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2 The book can be downloaded without charge at http://www2.itif.org/2016-think-like-an-enterprise.pdf.

definition, importance and history, is well-advised to read Atkinson's report. However, little will be said about the context Atkinson sets for his policy ideas because the treatment is for the most part conventional and the ground covered is likely familiar to readers of the *International Productivity Monitor*. Further, this review article will not rise to the bait of challenging or even discussing at length two of the points Atkinson no doubt considers central to the manifesto, namely the declaration that governments should "make productivity the principal goal of economic policy, more important than managing the business cycle, defending liberty, or promoting equality" and the dismissal of most economists' contribution to productivity research and the formation of policies to enhance it.

I strongly concur with Atkinson's belief in the benefits of robust productivity growth. But I feel I would need a better grounding in philosophy, ethics and likely many other subjects to weigh in on a debate of productivity versus liberty. Without such grounding I even struggle with the notion that there are trade-offs between productivity and liberty. More importantly, it seems wholly unnecessary to go down that road. Few would disagree that productivity is important; that its performance in most countries has deteriorated despite the application in many countries of policies intended to enhance it; and hence that governments need to attach high priority to enhancing productivity. This means that new perspectives should be considered on how best to do this.

Much of a review article could be devoted to adding necessary nuances to Atkinson's depiction of the views of economists toward productivity. It is too much of an extreme caricature to say that neo-Keynesian economists are only interested in managing the business cycle and have no interest in longer-run growth. And neo-classical economists do not necessarily shy away from an activist public policy role in productivity due to ideology alone. Many observe, as does Atkinson, that attempts at industrial or sectoral strategies are sometimes themselves the cause of market failures, such as skewing economic activity toward small enterprises where productivity tends to be lower than in larger firms. Others recognize that policy interventions have costs. These include the need to raise taxes to finance intervention and economic distortions caused by taxation and the policy-driven shift in resource allocation (although Atkinson would argue that the interventions he recommends would shift resources in a productivity-enhancing way).

Atkinson does not apply any sort of benefit-cost analysis to his recommended policy interventions. Yet while much could be said about how Atkinson depicts and criticizes economists' views, Atkinson's productivity strategies can be considered while largely ignoring this lengthy part of the manifesto.

As a final aside before addressing Atkinson's recommendations, it will be noted that the title of the manifesto "think like an enterprise" is at odds with the author's thesis. Atkinson is quite critical of key aspects of enterprises' objective functions. He notes that many try to maximize revenues or minimize costs rather than maximize productivity and he argues their focus is much too near term and this is to the detriment of making the investments that would enhance productivity. Left to their own devices, Atkinson believes firms will not behave in a way that maximizes well-being for themselves or society.

Atkinson argues that public policy should try to influence the objective functions of enterprises. He also thinks public policy needs to facilitate relationships between firms and sectors, for example in developing and spreading the use of a new platform technology as he believes firms on their own will not form the necessary liaisons and synergies. So he seems to be saying that governments should think quite differently than enterprises and try to modify how enterprises think and operate. But here too, it seems wise to proceed with analyzing Atkinson's ideas for improving productivity rather than carping at the title he chose.

What Is Not New in Atkinson's Productivity Strategies

Despite his considerable hype as to what is wrong with the perspectives of economists on productivity and public policy, much of what Atkinson recommends is conventional in economic analysis and actual policy approaches in many countries. This includes:

• stable fiscal policy, rule of law, correction of market-distorting regulations and other policies (such as those that favour small business);

• competitive domestic markets, although Atkinson notes that strong productivity does require firms to achieve considerable scale (he could have noted that firm size needs to be looked at relative to global and not just domestic markets as for the most productive firms the market for outputs and inputs is not just domestic);

• well-developed infrastructure (including in transportation and communication) that embraces public-private partnerships and user-pricing;

• an educated and skilled workforce including the development of high-quality managers;

• public support for scientific and engineering research, including help with the transfer of discoveries from the lab to the market; and

• minimize if not eliminate taxes and tariffs on capital goods.

These so-called framework policies are right out of the neo-classical economics playbook. To varying degrees they have characterized economic policies in many, if not most, nations over the past few decades. Yet productivity growth has slowed in most nations. Hence the appetite to search for other policies. Interestingly, Atkinson does not reject adherence to this conventional approach. Rather, he argues it does not go far enough. Although Atkinson does not use the phrase, his perspective on the so-called framework policies is that they are necessary but far from sufficient to drive strong productivity growth.

Before highlighting what is new in the report, a few comments will be made on the section concerning education and skills development. Like most discussion of framework policies, the take is quite conventional. Atkinson calls for more emphasis on education, not just on access but also on quality. Not surprisingly, he emphasizes the so-called STEM disciplines and management skills. He quite rightly calls for business to be more involved in education and skills training and for these endeavors in turn to be more attuned to business needs. More specifically, he emphasizes the importance of the "specific skills that fit existing and emerging needs of organizations."

It may be unfair to raise some qualms with this advice because it does flow rather naturally from many research studies and positions of international bodies such as the OECD. But I have a feeling that in the future different thinking will be applied to education, skills and productivity.[3] The notion of "overskilling" seems predicated on output of a firm and economy being fixed and the manner in which labour is utilized also being unchanged. Why cannot management of a firm recognize higher educated or more skillful workers as a blessing and change their operations to accommodate their potential contribution? In other words, to increase their productivity. The output of the firm can be expanded through taking a larger share of the domestic or global market, as the case might be. I also have a feeling there will be greater recog-

3 See Drummond and Rosenbluth (2015) for a discussion of this point.

nition in the future that it is extremely difficult, if not impossible, to anticipate the "emerging needs of organizations (for skills)" because everything changes so rapidly, due in good part to the technological changes Atkinson wishes to advance. Such recognition may bring about greater focus on developing broader competencies than "specific skills."

What is New or at Least Different in Atkinson's Productivity Strategies

Atkinson argues that in addition to framework policies that in good part attempt to remove barriers to investment and trade, measures are required that will more directly reduce the price of capital. This is because capital is key to increasing productivity (measured either as labour or total factor productivity) and, left alone, enterprises will under-invest because of inappropriate objective functions and a host of market failures. Of course, the notion of market failures is not new. The externalities of research are well recognized in economics and policy and used as a rationale for public research and tax incentives for private research. Atkinson's list of market failures is perhaps longer than conventionally recognized and includes:

- the return from investment (whether that be capital or knowledge) is larger for a society than for the firm as the benefits spread to other firms in the industry and broader networks of those involved, either directly or indirectly, in the production of outputs and inputs;
- firms face large risks in being early movers in developing new technologies;
- too many firms try to maximize revenue rather than productivity and have a short time horizon for considering the pay-off to investment;
- employers and/or employees impede productivity-enhancing investment because they fear it will lower employment;
- much of an economy consists of public and quasi-public institutions, which do not focus on productivity improvement, and in many instances, do not even measure their own productivity performance; and
- major innovations often require co-ordination across sectors (apps require broadband and the introduction of apps reinforced demand for broadband) and this is difficult to orchestrate within the private sector.

Atkinson's first two recommendations for lowering the price of capital – accelerated depreciation and investment tax credits – are themselves conventional in that they have been and continue to be used in many countries. Accelerated depreciation is surely not the heroic measure that will unleash investment. While this measure can address cash flow problems, it essentially just brings forward net profitability. Atkinson argues companies are too fixated with near-term financial results. More importantly, tax incentives have economic and fiscal costs. Atkinson pays no heed to this. Indeed, the only test he applies to the investment tax credit is to cite studies that show it raises capital investment. It would be surprising if lowering the price of an input in production did not increase its use. That does not mean such action represents a net benefit to society. Taxes must be raised to pay for the tax credits and their administration. That creates an economic cost due to the distortions arising from the taxation. Further economic costs could arise from the distortions created by the policy-induced reallocation of resources. Atkinson would naturally argue that the resource reallocation in this case would be welfare enhancing. A further distortion is injected from investment tax credits and accelerated depreciation allowances because they raise the price of existing capital relative to new capital. This may result in the premature write-off of capital which itself may be unproductive. Such investment incentives may also raise the price of capital.

Policy makers and economists, however they are branded, might not be too confident of a net real income gain from investment incentives. As Atkinson notes, many government policy interventions have in the past led to harmful taxation and regulatory policies. He argues that benefit-cost analysis should be applied to all these to weed out the welfare-reducing ones. Yet he does not apply or even suggest such benefit-cost analysis be applied to the interventions he recommends. Further, he is implicitly confident that new measures will not fall into the same trap as many older ones that often explicitly or at least implicitly subsidized unproductive firms and sectors.

In one of the more thorough examinations of the benefit-cost ratio of government interventions to foster economic development, John Lester (2016) has analyzed federal and provincial interventions in Canada through subsidies or tax preferences to determine which generated a real income gain. After examining costs such as the distortions from taxation required to finance the program and its administration and distortions in resource allocation, he concludes that very few initiatives raise real income. However, he does tentatively conclude that investment tax credits and accelerated depreciation allowances may yield net benefits. One of the reasons for the tentative nature of this conclusion is that Lester is concerned that his analysis to date does not capture distortions from initiatives raising the cost of existing capital relative to new capital.

As to what Atkinson labels "corporate short-termism," the only suggestion is to consider a proposal to "replace quarterly financial reports with a less frequent update, such as half-year results." It is not clear whether the suggestion is that governments regulate less frequent reporting regardless of the desire of shareholders and others. At any rate, such a move hardly seems likely to launch a new productivity era.

Atkinson argues governments need to be more involved in what he calls "platform policies." He argues that many of these are ICT-based and include innovations like smart grids, mobile payments and electronic IDs. He also refers to robotics, autonomous automobiles, and biological innovations. Greater government involvement might be direct research, support for private sector research, co-ordination of research and applications or government playing the role of early adopter. This fits well with one of Atkinson's themes that governments pay scant attention to the productivity of their own operations. In this case such policies could enhance government operations and promote externalities throughout the economy.

Atkinson also indulges in a little social re-engineering, pointing out that poor physical and mental health flowing from challenging childhood circumstances are major factors limiting productivity. Again these are not new ideas to many economists and followers of other disciplines. Atkinson could well have linked this section back to his notion of "short termism" in the private sector. The same afflicts governments in that investments in people are recognized as being solid in the longer-term but often do not pass the benefit-cost test for the next election.

The final two sections in Atkinson's productivity strategy concern a sectoral perspective on productivity and a focus on the public sector. However, the ideas in these sections have largely been addressed in what came before.

Conclusion

Despite over 100 pages of text, Atkinson's manifesto on productivity can be boiled down to a fairly straightforward proposition. Governments need to be more active on the productivity front. They need to assign it a higher priority (he argues it should be the top). They need to create the right conditions that will allow productivity to flourish. They need to gear their own operations toward being productive and recognize the positive spill-overs they can generate through smarter internal research, procurement and operating standards. And finally, but perhaps most importantly for Atkinson, they need to intervene more deeply and broadly into the economy through incentives for investment (capital and research) and co-ordination of the development and utilization of new platform technologies.

In principle and abstracting from specifics on policies, many, including a large number of the economists Atkinson claims are indifferent or intransigent on public policy and productivity, would agree with Atkinson's tenets. Yet as Atkinson acknowledges, policy interventions into economies in many cases and in many places have had negative effects. Too often industrial or even productivity strategies have ended up propping up unproductive firms or sectors.

This is not to say that Atkinson does not offer some promising ideas or that governments and others should not heed the productivity strategies he sets out. But the historical record does suggest caution. In many countries governments have done a reasonable job over the past few decades in addressing the so-called "framework policies" Atkinson refers to. Their record in driving their own operations through a productivity lens and of intervening in the economy to enhance the productivity of the private sector has been less than stellar. Is Atkinson's implicit confidence in the state warranted?

Many countries, Canada definitely included, have been following the same general recipe for productivity for many years. It has not proven successful. So new ideas should be tested. That should include some of the more activist notions of Atkinson.

This author came to the same conclusion last year in a report dealing with Canada that, along the lines of Atkinson, argued that adherence to the so-called "framework policies" wasn't getting the job done in strengthening productivity growth (Drummond, Calver and Capeluck, 2015). Like Atkinson, that report argued the dismal productivity record warranted consideration of other policy approaches to complement fixing up "frameworks." The distinction from Atkinson was the strong note of caution based upon the wreckage of previous attempts at industrial strategies and other efforts at policy activism. That caution elicited strong advice that policy measures must be subject to rigorous testing, ex ante and ex post, testing that must include a comprehensive analysis of costs of policy measures to ensure there is a net social benefit. That note of caution and that call for rigorous testing is missing from Atkinson's manifesto.

Atkinson could and should have applied stronger tests to whether the individual measures he proposed generate a positive net benefit ratio. It is not sufficient to simply demonstrate that lowering the price of capital increases its use in the production process. Further, he could have delved into productivity performances in different countries in an attempt to decipher the worth of the approaches he advocates. Many countries have offered and still offer investment incentives. Many countries have had active public policy participation in the development and dissemination of new platform technologies. Many countries have tried to facilitate clusters across firms and sectors. Can one demonstrate that such policy approaches have yielded stronger productivity growth than found in countries where the policy agenda has been less active? Such a finding might strengthen confidence in the directions Atkinson advocates.

Atkinson quotes from a paper of mine where I said governments' shyness to even refer to productivity was similar to the situation in Harry Potter where Lord Voldemort must be referred to as "He-Who-Must-Not-Be-Named" (Drummon, 2011:5). I would like to end with another quote. I agree with Atkinson that the time has come to conclude that the so-called "framework policies" are necessary but not sufficient conditions for strong productivity growth. New ideas should be considered and this might lead to greater policy activism. But given the damage of so many government interventions in the past, we should be heedful of the advice with which Sergant Phil Estehaus from the American television police series *Hill Street Blues* always ended his instructions to his charges: "let's be careful out there".

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