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A Growth Cookbook

Panel Discussion

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This note is a collection of recipes (hence a cookbook) of policy possibilities to foster economic growth. Two caveats are in place at this moment. First, we need to distinguish between policies aimed at changes in potential output, or the production possibility frontier, and policies targeted at closing the gap between potential GDP and actual GDP. This note will focus on the prior. This should neither be understood as a valuation of relative importance, nor should it ignore the possibilities that links between policies aimed at potential and actual GDP exist. Indeed, this is still one of the few under-investigated fields in modern growth theory. Second, this proposal will focus on economic growth, and employment questions shall be considered only in association with growth policies. In the following, we will exploit three specific recipes to foster economic growth, before mentioning two caveats.

1. Growth Requires Innovators

It has become common knowledge that economic growth, at least for countries at or close to the global technological frontier can only grow if innovations in products or production processes, that can generate more output with the some amount of resources, take place. Innovations are created by innovators. These are different from other economic agents not only by their ability to generate good ideas, but also by their willingness to bear risk and their devotion to provide effort. Whereas policy can do little about the creativity of innovators (except for education, as discussed below), it can do a lot to alter the incentives to bear risk and devote effort.

More important than small innovators (the garage start-ups), particularly for this country with its large supply industry, but much less discussed, are big innovators, that is firms which are willing to acquire contracts because they are willing to

develop and deliver new products. Because only innovations, or a participation in a Schumpeterian competition justify profits and high wages of an advanced economy. The alternative is to remain at the technological status-quo, and compete more and more in a Walrasian competition with firms in other nations, where wages and input costs are lower, and ultimately even loose this competition. Even more difficult to find than innovative agents are innovative firms. This may be for two reasons. On the one hand, firms have become small bureaucracies, where hierarchies are more important than good ideas. On the other hand, managers are not rewarded enough when taking risks, but face reprisals. This is the reason why stronger dynamic competition is required to foster the innovative potential of existing firms.

2. Innovations Require Incentives

Whereas little can be done to create innovators, incentives can be set so that more people with the potential will actually pursue innovative activities. An important basis for innovation is certainly a sound educational base. However, most innovations are not the result of a sound general education, but result from very specialized education that very few universities can provide. Therefore, we do require additional funds to educate high potential highly qualified people, that are – and this is an important point – willing to transfer an idea to a marketable product. So far, the ratio of ideas that finally come to and succeed on the market is very low for top-qualified people in Austria, both with respect to medium qualified compatriots (applied university graduates and apprentices) and internationally, where universities such as Cambridge in England and Stanford or the MIT in the U.S.A. provide great examples of graduates that became important innovators in great numbers.

Apart from educational policy that supports the most talented, policy can be active through both tax and expenditure policy. On the expenditure side, it has become common knowledge that apart from educational expenditures, subsidies for research and development and infrastructure investment all have a major impact on economic growth. Less known is the fact that taxation contains strong disincentives to invest. Let me illustrate this with an example. Suppose that an innovation has a chance of 1:2 to succeed (which is an extremely high probability for most innovations), and suppose that in the case of success it yields five times its costs. In the absence of taxation, this innovation will be undertaken (even under some risk aversion on behalf of the agent), as the expected revenue is 67%. However, high tax distortions will change the calculation. Suppose the innovation requires predominantly labour inputs, as is the case for most IT innovations. Then revenue will fall by 20% due to VAT, and cost will increase due to social security contributions and income taxation by around 50%, implying a negative yield of

around 10%. Bar a negative income tax on the losses in case of failure, these tax distortions prevent many per se attractive innovations from being realized.

3. Innovations Require a Beneficial Environment

There are several dimensions along which the economic and legal environment can be beneficial for innovation and economic growth. First, the transmission of ideas from the “garage” to the market needs to be facilitated, which requires an easier access to markets both through changes in trade regulations and a reduction in barriers to entry which are supported by the chamber of commerce.

Second, reentry needs to be facilitated. It is the nature of innovative activities that they fail more often than not. Bankruptcies are therefore a common feature of innovative entrepreneurs, should no longer be stigmatized as much. Banning innovators from the market after an unsuccessful attempt may lead to an unwanted reduction of the innovative potential of the economy, hence a reform of bankruptcy legislation seems appropriate.

Third, financial markets need to be willing to undertake risky ventures, instead of focusing on financing traditional sectors with a sound (brick and mortar type) securitization of credits.

Forth, a larger number of ideas needs to be transmitted faster from universities to market activities. For this purpose, more important than the creation of a remote elite university is the creation of business centers on campus, ready to transmit ideas from universities to markets.

Finally innovations require a lot of economic stability, as investments today will have a return only several years later. This supports the role of a stable interest rate policy on behalf of central banks. Indeed, central banks that react prematurely because of price signals (which are signal of Walrasian competition), may fail to support a climate supportive of Schumpeterian competitors. Indeed, the famous ignorance of Alan Greenspan to Walrasian market signals may be one of the reasons for the innovative potential of the U.S. economy in the 1990s. This also suggests that long-term labour contracts (e.g. Ireland and the Netherlands) may be beneficial for innovation, as they reduce the uncertainty of future wage claims. Long term wage contracts are most beneficial for young workers (who benefit most from high future wage increases due to productivity gains) and entrant firms, whereas old workers and incumbent firms tend to loose or at best remain neutral. As the latter two groups are organized best within the social partnership, this also calls for a reform within the social partnership to generate a more innovation supportive business climate.

4. Dividing the Growth Dividend

Economic growth is no ends, but a means to ensure social welfare. And apart from average income, distribution is important for welfare. One would hope that the growth dividend gets divided fairly among various income groups. However, whilst it may be intrinsically consistent to support the highly skilled in order to foster economic growth, as modern arguments suggest, this has negative distributional consequences. If all workers are paid their marginal productivity, than investing into the skills of high-potential individuals implies increasing their wage earning potential even further. Whilst one can argue that the distribution which the market induces, where everybody gets paid her marginal product, is fair, this can no longer be valid when policy specifically interferes to change marginal productivities. Financing investments into the highly skilled should therefore not be (tax-)financed by the general population, but instead paid for by the recipients of the qualification. In this respect, the U.S. system of educating the highly skilled seems more fair. There, every student pays his/her own tuition, which can easily add up to USD 50.000. It is true that highly skilled individuals receive a relatively higher wage than the unskilled (and the skill bias is more pronounced in the U.S.A.). But in part, the higher skill premium is used to finance the private educational expenditures. Reproducing the elitist educational system of the U.S.A. implies that one should also be willing to reproduce their mode of financing.

5. Does Economic Growth Create Employment? Or Vice-Versa?

Just like distribution, employment is an important issue for welfare. And it has often been argued that jobs are created only through faster economic growth. This is not necessarily the case. Higher economic growth is the result of structural change, and therefore it will at least in the short run lead to job destruction as well as job creation. Similarly, the result is ambiguous when investigating the relationship from employment to economic growth. On the one hand, a larger number of employees implies *ceteris paribus* a larger number employees in innovative activities, and hence higher employment is related with faster economic growth. This relationship has been labelled the “resource constraint” in the literature. On the other hand, a high number of employees induces high wage pressures. These higher wages render innovative activities, where wages have to be forgone before revenues are realized, less likely. This “incentive condition” which indicates a negative relationship between economic growth and employment is a modern day variant of the Marxian reserve army.