Paul Romer: What Drives Economic Growth?
By Dan Richards
March 16, 2010

Videos of this interview are available: Part 1 and Part 2.

Paul Romer is a senior fellow at the Stanford Institute for Economic Policy Research. He previously taught at the Stanford Business School, the University of California at Berkeley, the University of Chicago and the University of Rochester.

Romer’s research focuses on the drivers of economic growth. He summarized his views in an article he wrote for the Concise Encyclopedia of Economics:

Economic growth occurs whenever people take resources and rearrange them in ways that are more valuable. A useful metaphor for production in an economy comes from the kitchen. To create valuable final products, we mix inexpensive ingredients together according to a recipe. The cooking one can do is limited by the supply of ingredients, and most cooking in the economy produces undesirable side effects. If economic growth could be achieved only by doing more and more of the same kind of cooking, we would eventually run out of raw materials and suffer from unacceptable levels of pollution and nuisance. History teaches us, however, that economic growth springs from better recipes, not just from more cooking. New recipes generally produce fewer unpleasant side effects and generate more economic value per unit of raw material.

Every generation has perceived the limits to growth that finite resources and undesirable side effects would pose if no new recipes or ideas were discovered. And every generation has underestimated the potential for finding new recipes and ideas. We consistently fail to grasp how many ideas remain to be discovered. Possibilities do not add up. They multiply.

Dan Richards interviewed Romer on January 4 at the annual meeting of the American Economic Association in Atlanta, GA.

What originally attracted you to the study of economic growth?

Economic growth presents the most compelling question in human history. Why is it that we are so much richer than we were in the past? Why has the rate of
improvement in standards of living been increasing over time? I just found those questions fascinating.

What are your key conclusions?

The answer is very simple: It’s ideas – discoveries about how to rearrange things in the world and do things differently. That’s what drives growth.

So ideas have been driving growth, but growth has not been equal across societies. The US has had dramatically higher rates of growth in the last 100 years than most societies. We are seeing India and China catching up. What makes one society grow faster than others?

When economists were thinking of ideas in growth, many of them, including myself, focused first on technologies. What is becoming apparent now is that we need to think about another class of ideas, which is the rules people use to work with each other.

A technology would be how to rearrange copper and tin to make bronze. A rule would be how we establish property rights or set up courts. What distinguishes the most successful societies is that they have very good systems of rules.

The big challenge in the world today is to help countries that haven’t grown as well not only copy good technology but copy good rules.

Are those rules things like property rights and transfer of information?

They are property rights or those rules that make sure traffic flows safely in a city, or that make sure the water is safe, the air is clean, or that there is no crime. All of those things let large numbers of people work closely together. When we can work with lots of other people who are also working on ideas, we are all better off.

So there are some institutional issues that drive growth. To what extent do cultural differences between societies have an impact on technological and economic growth?

You can think of formal rules, like the laws, or informal rules, like we shake hands instead of bowing when we meet. Culture is really a set of informal rules.

The formal rules can change when we pass new laws. The informal rules can change gradually over time. Even though the informal rules are important, the formal rules can change those informal rules for better or for worse.
Think of Korea. They started out with different formal rules in the North and the South, even though the culture was same. The economic outcomes for the two Koreas have been dramatically different.

You’ve identified countries like Taiwan, for example, that do not have huge innate advantages in terms of resources, yet have been successful because of the cultural and institutional rules they’ve established.

The cultural rules and the formal policies that they implemented in Taiwan, in part due to some very good advice from economists, has been key to its growth.

We’ve had a period of very dramatic economic growth over the last 100 years. Some that say the growth rate in the US has slowed. Are we facing the possibility of significantly slower growth in developed countries going forward than we have experienced over the last 50 or 100 years?

No. For the developed countries as a whole, or the world as a whole, I think growth in the 21st century will be even faster than it was in the 20th century.

For any given country, growth may falter. Countries can change their rules in ways that will make things work not as well. We’ve seen many cases where the leading country falls behind. But amongst the collection of countries at the frontier right now, the growth rate will stay as high as it has been or go even higher.

Let’s talk about the role of technology and innovation. When people think of technology, the internet and the advances of the last ten years may come to mind first, but they just a small fraction of the changes we have seen over the last 200 years.

Even in the last couple of decades, for example, there have been advances in technology in discount retail that have dramatically lowered the price of goods for the working poor. This has been a very important contribution toward a higher quality of living. It’s a pervasive phenomenon.

We’ve seen very good economic growth in large measure fueled by technology. What are the key factors that individual countries can use to foster economic growth through technology?

There are some basic rules about how to give people freedom to allow competition in an economy that are relatively common in most countries.

These include property rights and the rule of law, but also competition. Competition makes sure there is always a chance for a new entrant to come in
and beat the old incumbents. When a country has that kind of baseline of good rules, the next most important thing is to invest effectively in education. That is a question of K-12 for sure, but especially in higher education, graduate school, research, and support for research by professors.

**To what extent are immigration policies important in terms of fostering economic growth?**

Immigration is one of those win-win situations like trade in goods. Countries that allow migrants to come in will almost always do better. The migrants that come will experience dramatic improvements in their quality of life. Unfortunately, we know that it is a controversial issue socially, so we don’t allow as much migration around the world as we should.

**Your research has shown that companies that innovate and do research don’t always benefit from faster dissemination of information. Bell Labs, which invented the transistor, is a classic case. How do you get around, as a government, the problem that companies won’t invest in research if they perceive they won’t be rewarded?**

This is where the rules get very interesting. For land it would be silly to say that property rights over land expire after 17 years and then nobody could own the land. For physical objects we are used to saying that somebody can own them indefinitely.

For ideas, we need to have a different system that will let ideas eventually become free. We put partial property rights, or what is called partial excludability, on ideas. That is so that new people can come along and use an idea and do something better with it. So if Bell Labs is not going to commercialize the transistor, let somebody else do it.

Then we need to find some other way to spur a little bit more innovation, because some of those firms aren’t going to be doing quite as much innovation as they should.

**When it comes to innovation, some of the work that Michael Porter and others have done has talked about the impact of clusters of firms in the same industry located close to each other. That creates infrastructure for that specific industry that gives those firms a competitive advantage against firms outside the cluster that allows all of them to grow. To what extent can government policy encourage and foster those kinds of clusters?**
I think that the best strategy for the government is to invest in people. Attract and train very talented people and then by and large give them the freedom to decide what they want to do.

People will naturally tend to work in clusters. Clusters will form on their own. Create the conditions, give them the tools, and turn them loose.

www.advisorperspectives.com

For a free subscription to the Advisor Perspectives newsletter, visit:
http://www.advisorperspectives.com/subscribers/subscribe.php