

*Tino SANANDAJI,
Ph.D., Research fellow
at the Research Institute of Industrial
Economics (IFN, Sweden)*



THE IMPACT OF THE TAXATION SYSTEM ON THE GROWTH OF ENTREPRENEURIAL COMPANIES AND THE NATIONAL ECONOMY IN GENERAL*

Good afternoon! My name is Tino Sanandaji. I am originally Kurdish but I moved to Sweden as a child. I got my PhD at the University of Chicago. Then I returned to Sweden and I am a researcher in Economics at the Research Institute of Industrial Economics.

Today I'd like to talk about entrepreneurial policies and, of course, broader economic policy.

Entrepreneurship is considered of course to be important. And there's a common perception that countries that are not good at entrepreneurship have low growth.

In 2002 George W. Bush told Tony Blair: the problem with the French is that they have no word for entrepreneur. So, entrepreneur in fact is a French word, coined by the French economist Richard Cantillon in 1755. And the word is not perfectly defined and people define it as managing any company.

However, the best definition I believe was given by Josef Schumpeter in 1934 who emphasized that an entrepreneur is the one who by doing something new is changing the equilibrium in the economy. In fact they disrupt the economy. And typically, by doing that, there's destruction and

* The text of the paper is compiled on the basis of the verbatim transcript of the author's oral speech. The author's presentation is given at the end of the paper.

creation, but the creation is thought to be stronger than destruction. And innovation does not necessarily have to be a new technology, computer or anything like that. It can have a new organizational form or a new production method.

We should also point out, that entrepreneurship does not have to be good.

Economist Baumol said once that you have to consider what was the most lucrative for the individual, which in turn depends on the structure of the society and institutions. People in different societies in different periods of history find it the most profitable to become rich by creating wealth, which is creating entrepreneurship, productive entrepreneurship or by taking wealth that others have already created and transferred to themselves. And this could be the destructive entrepreneurship.

The standard example is an oligarch who does a corrupt deal with the government and becomes very rich by taking value that other people have created. So, it's very important that the society, the rules of the economy make so that what is rational and profitable for the individual correspond with what is profitable for the society.

I used to say that society and economy incentivized the individual if he wants to become rich to create something for others, not to take what's been created. And when looking at history, we can observe that new technologies and innovation have not often been done by existing organizations but by entrepreneurs who create a new company.

For example, you can see that from James Watt, Alfred Nobel, Henry Ford, Kamprad (IKEA), Moore (Intel), Gates (Microsoft), Jobs (Apple), Brin/Page (Google).

And there's also scientific evidence that shows that entrepreneurial companies are more innovative, and that a lot of job creation is done by these rapidly growing firms.

We should not confuse these rapidly growing firms with small business. People have pizzerias, small coffee shop, — that's also a valuable economic activity, but they are almost never innovative and they don't tend to be in the same industries as these entrepreneurial companies.

They can theoretically be an entrepreneur, a restaurant can also be innovative, but most restaurants owners don't have innovations, they do a

standard business. And if you look at the ones that do have innovations and grow very rapidly they are very different from those typical ones.

The MacDonal'd's is also that started out small, Starbucks also started out small, but they had a unique business idea, that they observed what was new, the new technologies, the milk shake machines, that stuff, and they said: Wow! We can industrialize fast food, and we can use machines in standardized cooking to give people food fast.

The Starbucks history has started when a professor said: «American coffee doesn't taste good, European coffee is better». And it took off, when they copied an Italian tradition of espressos and strong coffee and high quality beans and so on and it was a very thought-out business plan.

In principal, a restaurant does not do anything innovative and cannot, and an overwhelming majority doesn't do anything. People have surveys of firms, and I have done it as well, and if you ask firms: do you have an interest in growing? Most of them say «no»! And if you ask: «Does your firm do you do anything innovative, an innovative technology or product»? They say – «no we don't».

And if you ask Swedish self-business owners – do you think yourself to be an entrepreneur or a small business, and you give them a definition, eighty percent say – we are a small business.

These are the countries with the highest rates of small business ownership in OECD (slide 5). And as you see the highest ones in OECD are Turkey, Greece, Mexico, Korea, Chile, Italy – these are not prosperous wealthy countries. And the lowest ones are the USA, Luxemburg, Switzerland, Canada – those are countries that we associate with being innovative ones.

And in fact we do have a negative correlation between the high impact entrepreneurs and innovative entrepreneurs and small firms. This kind of underdeveloped economies, they have high fragmented transaction costs, like Portugal.

Greece and Italy, they have more firms, every shop is his own. Let's say, in the USA the best organizations grow very rapidly, and they take over the market, for example, it's about such companies as H&M, Zara and GAP and so on.

You can find that the countries with low entrepreneurship don't have self-employment that is high.

The other way to measure entrepreneurship is to look at the investment of venture capital.

Commonsensically, US, Israel, Hong Kong, Canada, Switzerland, Singapore and so on, are more entrepreneurial based on the above definitions.

Let's now look at the link between entrepreneurship and taxation, which is complex. There are multiple aspects; one effect is when you tax something you typically have less of it. If you put high tax on gasoline people are going to use little less gasoline. That's a negative effect.

Then you have complexities, for example, tax evasion. Self-employed can more easily evade taxes.

In countries with high taxes they have more small businesses, because if you work you have to pay taxes. But if you have your own business it's easier not to pay your taxes.

And the key problem of taxation of entrepreneurship is that entrepreneurs are rare individuals. A very small number of people and individuals have the potential to be successful entrepreneurs.

Most of these people already have good jobs, job offers in large business, in academia, in government. And if there's a high tax on entrepreneurship it's not worth it to give up this safe career you have and do these things that are very uncertain.

These are American and European numbers (slide 8), if you look at American billionaire entrepreneurs, about half a percentage have degrees of elite universities such as Harvard, Stanford, Yale, one third have a university degree. These are extremely skilled people, compared to the general population. And you don't have any difference in education for the self-employed, they are the same as ordinary workers.

And there's that myth, I'd say, using the examples of Bill Gates and Mark Zuckerberg, that entrepreneurs are often very young, which is true in some cases, especially in IT.

But in general, successful entrepreneurs tend to be middle aged, mostly men, more than ninety percent of them. They tend to be people who are middle managers, scientists or something like that, or pretty high in the organization, have financial security because if you don't have financial secure you are unlikely to quit your job and start an entrepreneurial venture.

And even good ventures, let's say, judged to be good in advance, have a very high failure rate, because it's very competitive and there's a lot of uncertainty and things that can go wrong.

There are a lot of moments for the companies to grow, and if one of them goes wrong all of it goes wrong. And this is the core reason why you should consider taxes; you put a high tax, half of them won't do it, though another half will try and start a company.

If you require this very few individuals, skilled to try this and they want to try as fast as possible to do it, because so many will fail, and it has to be very profitable for them individually, because these are the choices made by individuals.

If you look at systematic research there's no systematic association between small business and taxes. However, there's a very strong link between capital gains tax and venture capital activities. As I said earlier it's a measure of innovative entrepreneurship.

Most of the value created by an entrepreneur — they create a firm they have a big share of. The stock market value goes up and that's the way entrepreneurs make most of their money. And that's the reason that the capital gains taxes are important.

And we also know that small businesses are more sensitive and responsive to taxes than workers.

This is a graph (slide 10), where we can see the link between the taxes and venture capital activity. This is the US. The line is the capital gains tax, and the bars are how much money was fund raised for venture capital that goes into these high tax companies. In the beginning taxes were very high and there was very little money going into venture capital. Then taxes were cut dramatically and it went up, then taxes went up and venture capital went down. So, you can see here that they do have a relation.

In most European countries and USA, taxes are one of the most important problems for entrepreneurship, especially in Sweden. As for Russia — taxes are not that important.

First of all, you have more competitive tax rates than the rest of the other countries, as far as I know about you tax laws, the taxes here are very low. In terms of entrepreneurship and taxation, Russia is a dream country.

As I said you require a lot of conditions for entrepreneurship. If you meet these conditions, but you have high taxes then you have a problem.

But in Russia the problem is that you don't meet all of these conditions. And this is my personal assessment — I think Russia does have for the conditions of having an entrepreneurial sector: you have skilled work force, especially skilled in science and IT, technologies, good tax rates and you have a lot of capital, a lot of rich people, rich government and so on.

Here is what Russia lacks. First of all, you lack a favorable regulatory environment. The World Bank has a very high quality measure of regulatory environment for starting a new firm. It is based on having a lot of experts, who answer these questions and so on. Of all the countries, Russia ranks ninety two. The higher the number the worse. And Sweden I think is eighteen on this, and the US is too.

Changing the regulatory environment does not cost anything, it is even gonna make it cheaper if you reduce regulations.

You still lack the support infrastructure and as I mentioned before in entrepreneurship, the Silicon Valley not some guy built something in a garage did something and then grow in it. It is completely formalized, you've got of support infrastructure — universities, venture capital, business angels, and, of course, infrastructure develops.

In countries where there are some ideas and potential entrepreneurs you need a potential entrepreneur to get a support infrastructure and you need a support infrastructure to get more entrepreneurs. And in Russia, as far as I have understood this has not yet developed.

Russia has huge problem with institutions — you have very high transaction costs. I think most of you will agree on the examples of these institutions — the high corruption, weak property rights protection, poor patent enforcement, lack of rule of law, and, finally, the lack of interpersonal trust.

And if you don't have these conditions, if I invest and I become rich then there's a big probability that someone is gonna take that money from me, either it could be through crime, through government, through corruption, all of this stuff. And if I know that why should I invest in this country? I will go and invest somewhere else.

It's interesting you have a lot of Russian entrepreneurs in the USA, the Google was started by the Russians. And you have other billionaires in the USA, Britain, in these countries, people who were born in Russia, were educated in Russia but they didn't become rich in Russia.

And it shows that you have skills for entrepreneurship, and these people have chosen to go to other countries. Though, most entrepreneurs have a disadvantage if they move to another country, because entrepreneurship requires networks, it requires knowledge about market, about consumer preferences, its language and so on.

As for interpersonal trust, there's a rich research literature published in the last twenty five years about trust.

And they ask people in various countries can you generally trust people, and if you ask this question I don't remember what the Russian number is, but it's low. If you ask this question in Turkey, five percent say – yes, you can generally trust people, and ninety five percent say – no, you cannot, you cannot generally trust people. If you ask this question in Finland, seventy percent say – yes, you can trust people.

And you find is that these answers and questions are extremely predictive of the range of outcomes. It starts with crime, with corruption, with a range of transaction costs, GDP growth, they even have done experiments with people. They drop wallets around the city and they see how many of them return that wallet to the police.

And you find that in countries with high trust they return this wallet, like I think in fact Slovakia, there was a high percent of people who returned the wallet. In the low trust countries, nobody returns the wallet and Russia is a low trust country.

And this is not a law that you just can change, it's a cultural trait that has developed over centuries or decades. By the way, it's interesting that the research suggests in the countries ruled by the communists trust lowers down. East Germany has lower trust level than West Germany. And now it's going back up in East Germany.

Medvedev said in the Silicon Valley, when he went to Stanford to see what they were doing and these are his comments, what he felt was lacking in Russia, which is that, the lack of risk taking, and Steve Jobs apparently told him that there's a lack of entrepreneurial culture.

And another interesting sort of expedition to Silicon Valley, they sent sixteen Russian companies a couple of years ago to Silicon Valley to present their products in a competition to attract U.S. venture capitalists as funders. All but one of the 16 businesses suffered from the same weakness – having good technologies there was no evidence that customers

wanted to buy their offering. Almost none of them had an idea of what could've been done with these products, they had no business plan or commercialization idea behind this. And of course, several people mentioned that innovation and invention are not the same thing.

Soviet Union invented a lot of technologies, first in space, but if you don't transform these technologies into a product you can sell to your consumers and firms you can't make money out of it. There 's nothing out to create jobs or have an economy. And Russia lacks that apparently.

And it's interesting that of these sixteen there was one of them who won. He had a business plan, he had an idea of commercializing the technology, he was a Russian who had had an MBA from an American business school. Probably, there they taught him to think about these things, about entrepreneurial mentality.

Somebody mentioned before that Adam Smith's ideas were proven wrong by the course of the Russian problems in the transition, I don't agree with that at all. Adam Smith didn't just say that if you have markets instead of planning you've got to be rich, that's a misunderstanding.

Adam Smith said that the wealth of the West was built on two foundations – economic system of a free market but also cultural norms, values and traditions, and human and social capital to support the capitalism.

Capitalism doesn't work in a vacuum. You require these things of trust, you require the capitalist class has that business sense, you require quite a lot of organizations, innovations, inventions, contracts, banking systems that you have to develop. We don't really understand how to develop and why; we don't know how to control the culture using politics, but it does appear that these things develop over time.

In Russia, they haven't developed, or if had developed they had gone away during seventy years of communism. And when they just put a capitalist system in a country that didn't have a capitalist culture, capitalist virtues, this just didn't work.

Anyway, I think the most important thing for Russian entrepreneurship is to develop capitalist virtues, norms and traditions. I don't know how you should do that, I think probably what Peter the Great did by sending people to the West, and then getting them back. He didn't just import Western technologies; he tried to import Western culture.

My last point is that my vision of Russia is not one hundred about entrepreneurship in general, is that Russia's great wealth is not your natural resources, but that it is your human resources and if you look at these international tests of students, Russia is slightly below average on PISA but it's far above average in TIMSS and PEARLS, in math, reading, science; Russian fourteen year olds are a lot better than most of the Western countries even that Russia spends extremely little on education; it's just four percent of GDP compared to almost ten percent of GDP in the USA. And yet, most of the Russian students are pretty competitive.

So, the main task of Russia is translating the very skilled workforce, giving them some additional skills, into an economic output.

Russia has the highest savings rate and higher labor mobilization rate than in the West. Not is it just enough to have formal capitalism...

I think that when Russia develops these capitalist cultural traits, soft skills and social capital, there is when we are going to see the growth take off.

Thank you!

“Entrepreneurship policy and taxation”

Tino Sanandaji
Institutet för Näringslivsforskning

Introduction

Data

Reform

Empirical strategy

Results

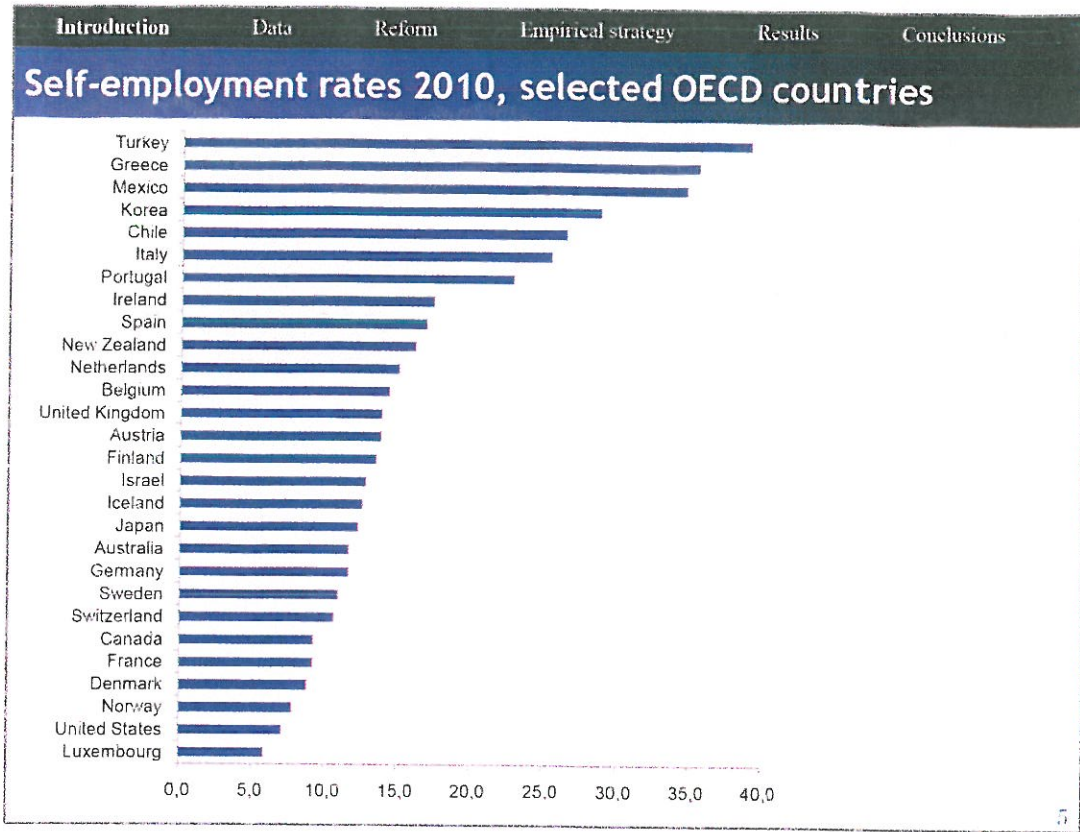
Conclusions

What do we mean by entrepreneurship?

- George W. Bush to Tony Blair 2002 (allegedly): “The problem with the French is they have no word for entrepreneur.”
- Concept of entrepreneur coined by French economist Richard Cantillon in 1755.
- Schumpeter 1934: Entrepreneurs exploit market opportunity through technical or organizational innovation. Does not include small business.
- Baumol: Entrepreneurs can use their talent either in productive or destructive way.

Introduction	Data	Reform	Empirical strategy	Results	Conclusions
<h2>Entrepreneurship, innovation and growth</h2> <ul style="list-style-type: none">▪ Waves of disruptive innovation historically spread through new entrepreneurial firms rather than old firms.▪ James Watt, Alfred Nobel, Henry Ford, Kamprad (IKEA), Moore (Intel), Gates (Microsoft), Jobs (Apple), Brin/Page (Google).▪ Entrepreneurship increases innovation (Acs and Audretsch 1988, Lerner and Kortum 2000).▪ High-growth “Gazelles” important net job creators (Henrekson and Johansson 2010, Haltiwanger et. al, 2013).					
3					

Introduction	Data	Reform	Empirical strategy	Results	Conclusions
<h2>Entrepreneurship ≠ Small Business activity</h2> <ul style="list-style-type: none">▪ Schumpeterian entrepreneur theoretically defined as innovator, agent of change, growth driven. (Gardner 1990).▪ Most self-employed are not entrepreneurs:<ul style="list-style-type: none">▪ Plumbers,▪ Taxi-drivers,▪ Shop and restaurant owners,▪ Consultants,▪ Dentists.▪ Most have no external employees and will never grow. 75-90% of American small business self-report no intention to grow or innovate (Hurst and Pugsley 2011).					
4					



- Introduction Data Reform Empirical strategy Results Conclusions
- ### Alternative measures of entrepreneurship
- High-growth firms,
 - Venture Capital Investments,
 - Billionaire entrepreneurs per capita.
 - Hong Kong, USA, Israel, Switzerland, Sweden, Canada and Singapore more entrepreneurial based on these definitions.
- 6

Introduction Data Reform Empirical strategy Results Conclusions

Theoretical link entrepreneurship and taxes

- 1. Direct effect, reduced effort (Carroll et al. 2000).
- 2. Compressed distribution (Domar and Musgrave 1944).
- 3. Evasion (Slemrod och Bakija 2008, Engström och Holmlund 2009).
- 4. Success Tax (Gentry and Hubbard 2000).

7

Introduction Data Reform Empirical strategy Results Conclusions

Who are the entrepreneurs?

- Competitive, requires combination of complementary skills
- Potential entrepreneurs are rare, have good outside options.
- High ex-ante uncertainty, about 75% fail entirely.
- Tend to be middle aged, industry experience, management-experience, highly skilled, good degree, have financial stability.

Table 1. Characteristics of American billionaire entrepreneurs: Educational attainment

Educational attainment (%)	Billionaire entrepreneurs	Self-employed	Salaried workers
High school or less	6.1	31.6	36.8
Some college	10.4	17.6	17.1
College degree	38.5	34.3	33.6
Advanced degree	45.0	16.5	12.5

Educational attainment refers to population aged 25+.

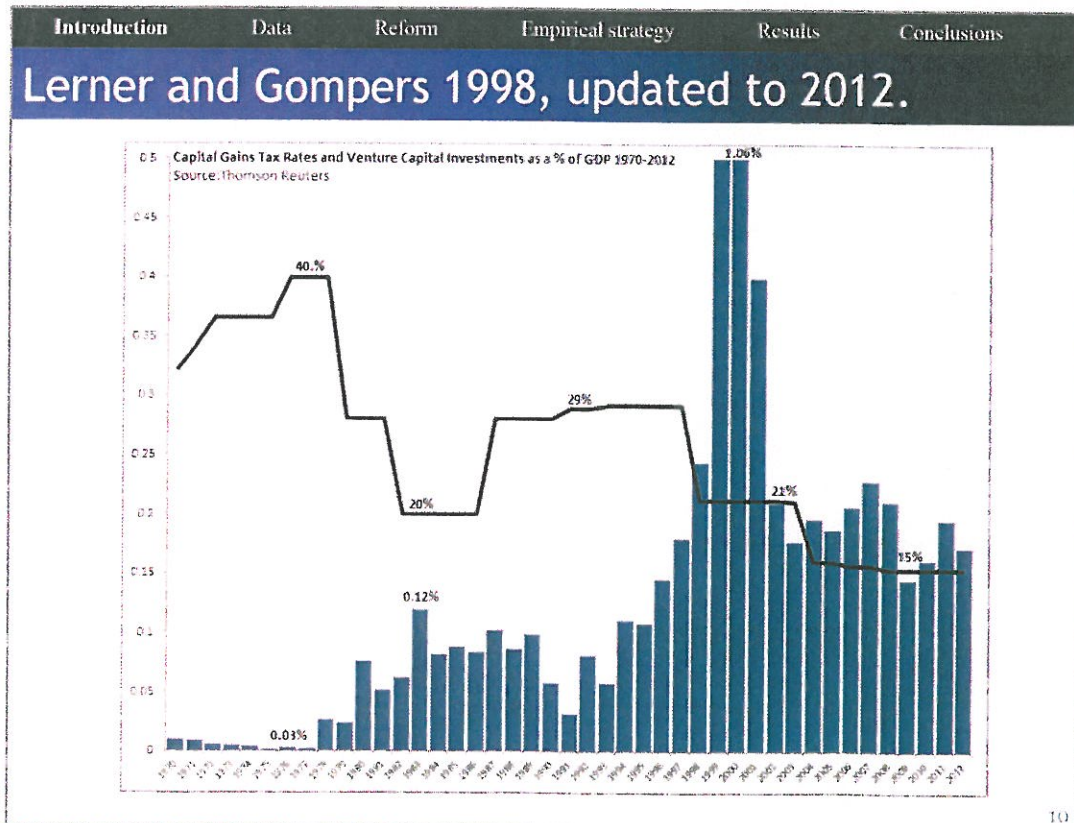
8

Introduction Data Reform Empirical strategy Results Conclusions

Previous findings on taxes and small business activity

- No consistent association self-employment and tax rates. (Schuetze and Donald Bruce 2004).
- Robust association between capital gains tax and Venture Capital activity (e.g Poterba 1989a, 1989b, Gompers och Lerner 1998, Da Rin et al. 2006).
- Elasticity of taxable income higher for self-employed than wage earners (e.g Saez 2010, Chetty et al. 2011, Kleven and Shultz 2013, Spencer and Selin 2014).
- Elasticity taxable income Finland -0.35. One third real. (Harju and Kosonen 2013).

9



Introduction	Data	Reform	Empirical strategy	Results	Conclusions
<h2>Conditions required for Entrepreneurship</h2> <ul style="list-style-type: none">▪ Russia has:<ul style="list-style-type: none">▪ Skilled workforce.▪ Technology.▪ Favorable Tax environment.▪ Financial Capital.▪ Russia lacks:<ul style="list-style-type: none">▪ Favorable regulatory environment (92nd place World Bank).▪ Entrepreneurial “culture”.▪ Support structures (universities/large firms/state/VC).▪ Formal and informal institutions:<ul style="list-style-type: none">Corruption,Property right protection,Patent enforcementRule of law,Interpersonal trust.					
11					

Introduction	Data	Reform	Empirical strategy	Results	Conclusions
<h2>Russian entrepreneurship</h2> <ul style="list-style-type: none">▪ President Medvedev in Silicon Valley on Russian entrepreneurship (2010):<p>“Unfortunately for us, venture capitalism is not going so well so far... No one wants to run the risk... It's a problem of culture, as Steve Jobs told me today. We need to change the mentality.”</p>▪ Russia anecdotally good at technology but lacks commercial focus:<p>“Sixteen companies were chosen to travel from Russia to Silicon Valley to present in a business plan competition and hopefully to attract U.S. venture capitalists as funders. All but one of the 16 businesses suffered from the same weakness - there was no evidence that customers wanted to buy their offering. These were technologies and ideas in search of a market.”</p>▪ Invention vs. Innovation▪ On Entrepreneurial “mentality”					
12					

Russia wealth: Human rather than natural resources

- Below average in PISA, significantly above in TIMSS and PIRMS.
- Strong supply of factors of production is not sufficient for growth.
- Neither is formal capitalism, as Russian experience proved.
- Capitalism in west not built on vacuum, but on foundation of capitalistic institutions, culture, norms, business practices and organizational capital which evolved over centuries.
- Entrepreneurial “culture” and how it develops.

13

Appendix

- The source of wealth for all 1723 billionaires listed on Forbes list 1996-2011 investigated, identifying 996 self-made billionaires in 53 countries who became rich by founding new firms.
- Includes founders of half of largest new firms created post-1945.
- **American:** Intel, Microsoft, Apple, Google, Yahoo, Bloomberg, PayPal, Facebook, E-bay, Dell, Hewlett-Packard, Amazon, Wall-Mart, Home Depot, Nike, Starbucks, Subway, CNN, Fox News, HBO, Ultimate Fighting Championship, University of Phoenix, FedEx.
- **European:** IKEA, SAP, Aldi, Zara, H&M, JYSK, Armani, Benetton, Red Bull GmbH, Swatch, Virgin Group.

14