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## Trust and prosperity

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Trust matters. It does so in almost any scenario that involves two or more people. For example, as economists (should) know, markets cannot exist or function effectively without some minimal degree of trust. Governments are attempting to deal with the current economic crisis by pursuing a Keynesian solution, namely, to inject large amounts of money into the economic system. What they (should) know is that the fundamentals of the economic system are by and large relatively strong, but what has happened is that some key sectors of the economic system are engulfed in a significant crisis of confidence. Trust has broken down, big time. Governments are trying indirectly to find ways to restore it. The recent, dramatic rate cuts by the Bank of England are perhaps best interpreted as attempts to restore some degree of confidence and trust.

Trust is the glue that holds relationships together. Once it is lost, a relationship is almost doomed to fail. Similarly, without some minimal degree of trust, organizations, communities and societies could not exist. Trust is a critical ingredient for successful cooperation. The greater is the degree of trust, the more productive will people be. Trust and prosperity, economic or non-economic, are intimately connected. In relatively prosperous nations, its presence is often taken for granted. That is not the case in

relatively poor nations, where there is often insufficient trust in a wide range of situations.

Trust is an important part of what is known as social capital. The role that this intangible form of capital plays in the performance of any organization or society has not been adequately emphasized by policy-makers and economists. And yet it is a critical determinant of productivity and success.

In order to build and maintain trust amongst people in organizations and societies, they need to get together, do things together, and interact face-to-face. In various ways, the Internet does not help in that respect, as people spend more time on their own. Weekly get-togethers in the evening in the bar, however, can help. Policy makers should recognize that investing in activities that bring people together helps develop and maintain trust and social capital. This, in turn, contributes to productivity, good working relationships, and citizenship. It is a crucial ingredient for successful cooperation and prosperity.

Trust is a subject that desperately needs more study and analyses from more than one discipline. It needs more attention and focus from policy makers, at all levels and in all organizations and communities. Without it, prosperity is threatened.

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## The returns to higher education: variations by subject and degree class

The government is due to review the cap on “top-up” fees later this year. **Robin Naylor, Jeremy Smith**, and colleagues fear that a big rise will deter some people from going to university: their research shows that although on average a degree gets you a pay premium, there are wide variations in the returns to higher education by subject and degree class

The burden of funding higher education in the UK has steadily shifted away from the taxpayer and towards students and their families. Since 1998, all full-time UK university students from within the European Union have paid uniform tuition fees. And since the autumn of 2006, universities have been able to charge “top-up” fees up to a regulated maximum, differentiated by university and by course.

When tuition fees were first introduced, much was made of estimates indicating that the average return to an undergraduate degree is high. On the basis of this evidence, proponents of the new arrangements argued that it was reasonable to expect students to make a more substantial contribution to the costs of higher education.

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The pay premium for a first or upper second is considerably higher than for a lower degree class

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Some of the most influential evidence was based on analysis of the 1958 birth cohort, in which the typical graduate would have left university around 1980. But there been many changes for more recent cohorts in terms of both the supply and demand for highly skilled labour.

One notable change is the significant increase in the proportion of young people going to university since the late 1980s. In a new study, we analyse data on one of these later generations for whom participation rates in higher

education were higher: the 1970 birth cohort, in which the typical graduate would have left university in the early 1990s.

In policy discussions about tuition fees, substantial weight has been placed on estimates of the average return to a degree. But variations around the average are clearly an important dimension of the debate and they have been under-explored. Our research examines heterogeneities in returns by such factors as gender, family background, ability and subject studied.

But our main focus is the extent to which the returns to a degree vary with the class of degree awarded. The principal reason for this is that we might expect employers to rank graduates at the point of recruitment – and degree class is the characteristic by which employers are most likely to base a ranking of job applicants.

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A social science degree gives the highest wage return, followed by science and then arts and humanities

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We use information on the gross hourly wages of 2,919 individuals – 1,497 men and 1,422 women – at age 30, drawn from a cohort of babies born in England, Wales, Scotland and Northern Ireland in one week in April 1970.

Our results confirm that the average wage return to a degree is substantial. We find that relative to otherwise similar individuals whose highest educational qualification

level is two or more A-levels, a university graduate will earn a pay premium of 16% for men and 19% for women.

But there is variation around these averages. The premium for a good degree (a first or an upper second) is 22% for men and 25% for women, while the premium for a lower degree class (a lower second, a third or a pass) is 12% for men and 15% for women. The difference in the wage returns between good and lower degree classes is remarkably similar by gender, at 10 percentage points.

The subject graduates studied also makes a considerable difference to the returns to a degree. For men, social science gives the highest wage return (32%), followed by science (22%) and arts and humanities (13%). For women, the ordering of subjects is the same: social science gives the highest wage return (28%), followed by science (22%) and arts and humanities (19%).

We find little evidence of significant differences in the returns to a degree by either family background or ability.

Our finding on the average return to a degree makes the

investment decision of participating in higher education seem an attractive proposition. But our evidence of the marked variation around this average (according to both subject and degree class) renders the return on investment in higher education potentially much lower at the margin. This implies that any substantial increase in the regulated maximum for top-up fees risks deterring participation in higher education.

#### *Publication details*

This article summarises “Heterogeneities in the Returns to Degrees: Evidence from the British Cohort Study 1970,” by Massimiliano Bratti, Robin Naylor and Jeremy Smith. Weblink: <http://is.gd/nzO8>.

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## Retail electricity prices in the UK: the impact of market reforms

Have domestic consumers benefited from the New Electricity Trading Arrangements (NETA) and other institutional changes designed to increase competition and reduce retail prices in the UK electricity market? **Michael Waterson** and his colleagues find that the net effect has been merely to rearrange where money is made in the system.

The electricity industry in the UK is separated into four basic elements: generation; (high tension) transmission; (local) distribution; and supply. In most cases, the distributor and the supplier are different entities. An analogy is the distinction between Amazon, the supplier, and the Royal Mail, the distributor.

Most people are aware that they can choose and switch their supplier (the company that bills them), and very large numbers of people switch supplier each year. Some may also recall that when the UK electricity industry was privatised in 1990, the system initially involved a “pool,” in which demand and supply were equated half-hourly to deal with the problem that electricity cannot be stored.

Transmission and distribution are both regulated in price. Therefore, an optimistic description of the electricity market might say that it has two competitive stages at either end of the production process – generation and supply – with two strictly regulated stages sandwiched in between – transmission and distribution.

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### Despite a series of reforms, competition seems not to work particularly well in the retail market for electricity

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But complaints about energy pricing have not gone away; indeed, far from it. The suppliers imposed double-digit percentage price rises on consumers in 2008. And the House of Commons Business and Enterprise Committee has reported several times, questioning among other things the extent of competition in various parts of the system, and calling for greater scrutiny and intervention.

We have been here before. Generation was first opened to competition in 1990. But, following several interventions to increase competition, it was decided to transform the existing pool arrangements to reduce wholesale electricity prices and (as a result, it was hoped) to reduce the prices for final consumers.

This change was the introduction of the New Electricity Trading Arrangements (NETA) in 2001. The regulator OFGEM (Office of the Gas and Electricity Markets) regarded NETA as a success, so in 2005, it was extended to Scotland (under the name BETTA – British Electricity Trading and Transmission Arrangements), where different arrangements had been in place.

Shortly before NETA was introduced, competition in supply was rapidly rolled out across the country. This was

viewed as such a success that all regulation was removed from the supply market in 2002.

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### The “big 6” generator-suppliers in the UK have significant pricing latitude at the retail level

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Our research looks at the period 1999 to 2005 to assess whether NETA was a good idea for domestic consumers. In examining this period, we benefit from the fact that the market arrangements in Scotland were unchanged and the fact that the gas market, which had been privatised earlier, was essentially unchanged. We therefore have some fixed points on which to base our analysis.

We are able to construct a consistent comparison of wholesale prices before and after NETA. We are also able to compare England and Wales under NETA with Scotland under an unchanged system.

We find that although NETA did succeed in reducing generating margins, margins earned on domestic retail contracts increased. In other words, the net effect of this reform – and the various other changes that came in its wake, such as the significantly increased degree of vertical integration among generator-suppliers – was essentially zero.

Our results suggest that competition does not work very well in the retail market. This may be because market entry for new suppliers seems so difficult. And it means that the existing “big 6” generator-suppliers – British Gas, E.ON (formerly Powergen), npower (RWE), Edf, Scottish Power (Iberdrola), and Scottish & Southern – have significant pricing latitude at the retail level.

Where this matters particularly is in electricity supply to the vulnerable – the old, the poor and the confused – who probably find it more difficult to negotiate the system as it now exists.

#### *Publication details*

This article summarises “Price Transmission in the UK Electricity Market: Was NETA Beneficial?” by Monica Giulietti, Luigi Grossi and Michael Waterson. Their research was funded by the Economic and Social Research Council (ESRC). Weblink: <http://is.gd/nzP8>.

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## The Soviet Union's military budget: secrets, lies and half-truths

In the mid-1980s, Soviet leaders began to regret the price they were paying in the international arena for extreme secrecy in military affairs. **Mark Harrison** examines new evidence on their decision to release more information about defence spending – and the difficult process of revealing the truth.

In 1930, faced with disarmament negotiations, Stalin's Politburo decided to lie about the Soviet military budget. For a few years, the published figure was below the true one by a wide margin. In 1935, given the collapse of disarmament hopes and the rise of Nazism and Japanese militarism, it was decided that there was nothing to lose from resuming truthful publication. This was done the following year.

Half a century later, entering talks to limit strategic and theatre nuclear weapons, the Soviet Union faced the same problem. Its official statistics had lied for at least two decades about the true size of the Soviet military budget. The figure the Soviet Union reported – around 20 billion roubles in the mid-1980s – was only a fraction of the truth.

The real figure was a much-analysed mystery in the West. A new Soviet leader, Gorbachev, was trying to persuade the West that the Soviet Union was neither a strategic threat nor a growing one. In that context, the lie was undermining Soviet credibility.

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Without the constraints of political and economic competition, Soviet secretiveness became a monster that devoured the system

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What happened next? The Hoover Archive at Stanford University holds the papers of a senior Soviet arms control official, Vitalii Kataev. These papers show how the Soviet leaders came to let go of one of their most valued secrets – one that Western agencies had devoted huge efforts to guessing or uncovering over many years.

In 1986, Gorbachev's Politburo resolved to move towards greater openness in military matters, including the defence budget. The reason given was that otherwise they could not get past Western suspicions of the "Soviet threat." That this was a genuine determination is suggested by the delays and foot-dragging that followed.

The first problem the Kremlin leaders encountered was identifying the true figure. Only a handful of people thought they had access to the true figure. But it is also possible that nobody knew it.

The truth had to be compiled from many different government departments and accounts. There were many sources and subsidies, including some that were indirect – for example, budget and off-budget subsidies to the engineering industry. So it was unclear how thoroughly to sweep the general budget accounts for direct and indirect defence costs.

There was also resistance. A coalition of resisters, led by Marshal Sergei Akhromeev, chief of the general staff, offered both strategic and commercial grounds for delay.

The strategic considerations were that the Soviet Union was trying to negotiate an arms control treaty with the United States from a position of strategic partnership, as one global superpower with another. In this context, the emerging rouble figure was going to look "too low." If the Soviet Union was not spending a figure comparable to United States dollar spending on defence, how could it claim strategic parity?

A related issue with commercial implications was that the new figure would make Soviet military hardware look "too cheap." This information would undercut the

profitable prices that Soviet exporters were currently charging to foreign purchasers of armaments.

Some figure would have to be found that would yield a compromise between Soviet economic facts and strategic objectives. For the time being, Gorbachev temporised. In 1987, he told the world only that the previously published budget figure was incomplete. The Soviet Union, he said, would have to undertake internal accounting and price reforms before publishing its true military budget by 1989 or 1990.

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This episode throws light less on the supposed burdens of military spending than on the burdens of secrecy

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There matters stood for two years. In the absence of further reforms, internal and external pressures for disclosure built up. In 1989, Gorbachev announced a new figure for defence outlays: 77 billion roubles for 1989, nearly four times the previously reported figure. The new figure was much discussed at the time. Most likely it was still an underestimate. But it was now a two-thirds truth, rather than a deliberate lie. The Soviet military-industrial complex was gradually being forced out into the light of day.

What are the implications of this story? One is that Soviet leaders had no basis to believe that their economy was being crippled by defence costs.

According to one document, Akhromeev urged continued concealment to allow Soviet leaders to go on blaming the poor state of the economy on the defence burden, despite believing this to be untrue. There may have been some illusion here, but even corrected figures would probably show a defence burden that was still relatively modest and shrinking, not increasing, when the economy collapsed.

In my view, the bigger story is the costs not of defence but of secrecy. Market economies thrive on political accountability, freedom of expression and low-cost information. Where secrecy is based on legitimate commercial or military concerns, an environment of political and economic competition generally prevents it from getting out of hand. Lacking these constraints, Soviet secretiveness became a monster that devoured the system.

### *Publication details*

"Secrets, Lies, and Half Truths: The Decision to Disclose Soviet Defense Outlays" by Mark Harrison is available as Working Paper No. 55 in the Political Economy Research in Soviet Archives (PERSA) series. Weblink: <http://is.gd/nzPG>. An abridged version is published as "A No-Longer-Useful Lie" in *The Hoover Digest 2009*, No. 1, available from <http://is.gd/nzQ4>.

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