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Learning to Destroy

Case studies of creative destruction management in the new Europe

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1. Introduction: We live in a world of junk

In an era obsessed with issues related to economic development and globalization, it is perhaps unnecessary to point out that our capitalist systems of production provide a fascinating and dynamic, but at the same time highly problematic, method of bringing about socio-economic change. Far-reaching objections against capitalism have focused above all on the ever increasing brutality of competition, especially in a dramatically globalizing era, with its severe negative impacts on people's lives and well-being in a variety of dimensions. Following the Marxian legacy there is fear – or hope – that this will lead to social upheavals and ultimately political revolutions that would undermine the institutional foundations of the capitalist system. The argument recalls Schumpeter's (1942) own doubts as to whether capitalism would be able to survive over the long-term.

In this paper, we will discuss a somewhat different but largely neglected issue in capitalism's inherent problems. It takes as its point of departure the observation that capitalist systems tend to produce a variety of goods and services that are successfully marketed and sold, but which are in reality not always very useful to people and organizations and which in many cases may bring more harm and unhappiness than positive effects. And even when they do not bring explicit harm and unhappiness many products appear questionable because they are often vastly inferior in terms of function and quality vis-a-vis existing and price-worthy alternatives – alternatives that for one reason or another do not manage to reach out to the users.

By simply looking at the shelves of hypermarkets and the endless rows of shops in our cities, and browsing over massive varieties of virtual market places, a very few things seem to be truly useful and beneficial to us. Particularly in the richest countries in the world, most of the things bought are products that people could easily live without, while still being at least as happy as before. We buy vast amounts of unhealthy foods which make us fat and sick, alcohol and tobacco that make us drunk and addicted, cars that destroy our environment, pharmaceuticals that do not improve our health. We build wind turbines and transmission lines that destroy our landscapes, move into houses that are terribly ugly, fly airplanes that are bound to crash, watch senseless movies and TV programmes, buy and sell weapons to kill our fellow citizens, etc. In a sense, it seems reasonable to say that we live in a world full of junk.

This aspect of capitalism may seem natural, like a necessary evil and a price we have to pay if we want to enjoy the benefits of the same system. Ironically, the production of junk can be seen to contribute heavily to the accumulation of wealth in capitalist countries, because it is to a great extent

exactly the income from selling junk that gives many of us the opportunity to buy more useful goods and services, and hence improve our well-being. This may – at least in democratic countries – make it politically difficult to engage in a process aiming at limiting or decreasing the economy's production of junk. It is a dilemma that highlights the difficulties, from a political point of view, of managing creative destruction, pointing at the need not only to perpetually create ever new products and processes in the evolving economy, but also and above all to enable the removal and destruction of obsolete things.

In fact, it is by no means clear that the main challenge for the innovative capitalist economy is to *create new innovations* – it may very well be that the more difficult task is to find mechanisms to *get rid of old junk*, since it is often the superfluous existence of old junk that actually hinders more useful innovations from being created and henceforth diffused effectively in the marketplace. As already mentioned, many old and obviously outdated products and processes continue to be extremely dominant in the economy *despite* the existence of new, better and economically viable alternatives. If those outdated things could be effectively removed, the diffusion of better innovations would obviously become much easier and more effective than ever. From this perspective, creative destruction management is very much a challenge of learning to destroy.

2. The Baltic Sea Region as an East-West arena for creative destruction

While we might use theories of innovation to speculate in a deductive way about the most effective political means to get rid of old junk, as well as the creation of rooms for new and better products and processes, we will briefly discuss how the corresponding processes have actually taken place in a number of cases. An interesting question here is whether some countries can be seen to be more successful than others at managing creative destruction in this sense of the concept? And if so, why? A related question then arises: how can other countries learn from the success stories; i.e., how can countries with weak performance in creative destruction improve and become more efficient through the learning that can be drawn from more successful countries?

The Baltic Sea region seems to provide an excellent arena for studying how creative destruction has been managed in countries with different types of political and economic systems. All countries in the region can now be labelled capitalist countries, but the region is comprised of both small and large countries and, above all, countries with very different historical paths to development.

Let us here focus first and foremost on the East-West divide in the region. By 'Eastern' countries I mean those countries in the region which were part of the Soviet Union or the communist Central and Eastern Europe – i.e., Estonia, Latvia, Lithuania, Poland, East Germany and Russia. By 'Western' countries I mean countries that have been part of the capitalist world for a longer time – i.e., Sweden, Finland, Denmark and West Germany. The East-West divide in this sense provides an intriguing possibility to investigate the ways in which political discontinuities in the East following the collapse of the Soviet Union have created opportunities for more radical creative destruction. In earlier research on innovation it has been hypothesized that newly industrializing countries might be able to 'leapfrog' the more advanced countries in some technological transitions (Perez and Soete 1988) as a consequence of the Eastern countries' lack of the often problematic historical inertia of the West. In Eastern Europe, the situation is somewhat different from that of developing countries, as this region is not 'newly industrializing', but has a long industrial history. But the radical characteristic of system change in the years around 1990 begs the hypothesis that the political revolution opened up a window of opportunity with regard to the necessary processes of destruction. Such a window of opportunity could at least theoretically lead to a competitive advantage in some respects for the East because the same destruction in the West would be much more difficult to realize due to its countries' more stable societal development.

Against this background, the main purpose of this paper is to investigate whether the Eastern countries in the Baltic Sea region have been able to take advantage of their unique historic position after the collapse of the Soviet Union, and use it for effective creative destruction management.

3. Enabling destruction: Four case studies

The four cases selected below focus on the challenges in creative destruction from the 1980s to the present – i.e., two cases each from the ICT sector and the energy sector.

Case 1: Getting rid of outdated banking technologies

In the early 1990s, banking services in the capitalist world were still almost exclusively based on manual solutions, on century-old innovations such as cheque and giro systems which were widely diffused and extremely popular in the marketplace. Banking was, like most service industries at that time, very much a traditional 'supplier-dominated' industry (cf. Pavitt 1984). Since the 1960s banks has had taken an interest in computer technologies for internal processing, but this was something that the customers rarely came in direct contact with. In the communist countries, banking was

considered a peripheral activity in society, and lagged behind the developments in the West. For example, Eastern countries typically lacked a cheque system; wages were often paid in cash; and customers had to visit the company office in order to pay bills.

In the late 1980s and early 1990s, banking service innovations in the West focused on such areas as ATMs ('cash machines'), off-line computer banking and not least computerized telephone banking. Especially in Western countries, banks invested heavily in the development of telephone services for the mass of their private customers, foreseeing that enormous cost-cuts could be achieved if a range of traditional banking services could be performed automatically with the aid of machines to guide customers, instead of customers visiting the bank's physical offices. Telephone banking was, in this sense, a process innovation, i.e., offering more or less the same service products as before but in a new way through the aid of new technology.

In the mid-1990s, when the World Wide Web and the first useful web browsers had been invented, some banks started to get interested in an alternative service paradigm to telephone banking. The idea was to enable banking customers to buy banking services over the Internet. It was a magnificent idea that seemed to have the potential to conquer the entire computerized world's banking markets. However, Internet banking enthusiasts faced a tougher way forward than they had expected. One reason was, as in so many other cases when fabulous new technologies emerge, that the invention was initially very crude and did not work well and reliably. In particular, there were technical and institutional obstacles related to information security that would have to be solved. Another and probably more important reason for the difficulties was that most banks in the West had already invested large amounts in the older telephone-based technological path. For these banks, Internet banking represented a competing trajectory and therefore a threat. They were also extremely reluctant to give up their activities in the existing field. In addition, the existence of reliable old-style banking solutions (cheques, giro, etc.) meant that it was not necessarily imperative to advance quickly towards Internet-based services.

However, the development was surprisingly different in Estonia, a former Soviet republic which was still extremely poor in the mid-1990s where its main banks had not yet had time or financial resources to invest heavily into telephone banking, and where the entire banking industry was still in its very infancy. Some banks that were essentially recent start-ups decided to offer their customers online Internet banking solutions without hesitation, starting already in spring 1996 (*Baltic IT Review* 1996). This was much earlier than corresponding developments in many Western countries, including Sweden, where the banks behaved much more carefully and conservative-

ly with respect to the new Internet opportunities. By 2002, around 25% of Estonians were already using Internet banking services actively, whereas in most West and South European countries the penetration was around 10%. In the US, where the cheque system remains extremely dominant, the penetration was no more than 4%. The Nordic countries, on the other hand, had managed to catch up with Estonia, riding on their high overall Internet penetration ratios (Kerem 2003: 20).

With hindsight, it is perhaps not the rapid growth in Internet banking in Estonia, outpacing most of the much richer Western countries, that was the most striking aspect. With its enthusiasm for the Internet in general and its liberal policy on competition in the banking sector, combined with its strong inherited competencies from the Soviet era in the field of ICT, it is hardly surprising that Estonia achieved this success. The government had to 'manage' hardly anything. On the contrary, the success in Internet banking inspired government agencies to initiate creative innovation in Internet-based public services (Högselius 2005a). The main point, instead, is the obvious inertia and difficulties faced by Internet banking proponents in most Western countries. In Sweden and Finland, which form two exceptions in the West, healthy competition in the banking sector combined with a strong Internet penetration seems to have paved the way for a relatively swift introduction and diffusion of Internet banking after the initial conservative hesitation. But in countries such as Great Britain, France, Germany, Italy, the Netherlands and especially the United States – all technologically-advanced countries that certainly did not lack the necessary competencies to engage in Internet banking development – it turned out to be extremely difficult for the new services to diffuse in the marketplace. The reason was obvious: that the already existing, though technologically outdated alternatives, had very deep roots in the daily routines of the masses and that they were seen to function smoothly. That is to say, there was no radical need for improvement from the perspective of the users.

Case 2: Shutting down old-generation nuclear power stations

Nuclear power is a technology that has been hotly debated since the 1970s. This has been especially so in the Western world, where political systems traditionally allowed a much higher degree of public controversy, compared with then Eastern Europe. The most enthusiastic proponents of nuclear power viewed it as a more or less universal solution to virtually any societal problem. On the other hand, among its opponents nuclear power has been portrayed as a disastrous threat to human civilization (cf. Anshelm 1999).

Not least in response to the critical arguments against nuclear power, nuclear scientists and engineers have been strongly inspired to pursue far-

reaching and radical innovation in their field, seeking to create more efficient and increasingly secure nuclear power plants. The same goes for the variety of technologies that belong to the 'nuclear fuel cycle', such as uranium mining, fuel element fabrication, reprocessing technologies, nuclear waste management, transmutation of spent nuclear fuel, etc. In the field of nuclear reactors, impressive new reactor types have been developed, many of which have characteristics that make them radically different from early-generations nuclear power. However, the new generation of reactor models have so far failed to conquer the market for power plants, and the market thus continues to be dominated by early-generations nuclear power plants and conventional power production facilities, particularly based on fossil fuel.

Obviously, the new, modern nuclear power technologies would find it easier to achieve a market breakthrough if the older and basically outdated power plants (typically constructed in the 1960s and 1970s) that are still dominant could be removed from the energy system. Of course, not everybody would agree with the statement that the existing nuclear power plants are 'outdated', as they have often been continuously modernized. For example, the analogue control systems in the 1960s and 1970s have usually been replaced by digital control, which contributes to leveraging security, and the electric effects of many reactors have been successfully increased. However, these innovations still follow a technological path defined by the basic underlying technologies developed about half a century ago, and the actual improvements can be considered relatively minor compared with the much more radical innovations going on in new-generation nuclear reactor technologies.

In fact, some countries have politically tried to get rid of their old nuclear power stations. However, Italy is so far the only country that has actually fully decommissioned all of its old-style nuclear power. In countries such as Sweden and West Germany, political decisions have been taken that all nuclear power shall be phased out; but in reality this has not happened. Nowadays public opinion in these countries has shifted to being increasingly positive to the continued utilization of the old nuclear power plants. The nuclear power plants are often viewed as the 'least evil' in an energy system where the alternatives are above all power plants based on fossil fuel. Hence, creative destruction management in the field of nuclear power can only be described as a great failure in the Western world. To be sure, this interpretation does not mean that the old nuclear power reactors have not undergone significant improvements over the years, but it is certainly not possible to speak of any paradigm shift in nuclear power.

Some countries in Eastern Europe, however, seem to have been more successful when it comes to destroying its outdated nuclear power reactors.

Perhaps the most obvious example is East Germany, which still in the late 1980s had an extremely ambitious nuclear power programme, based on early-generation Soviet reactors. Immediately following reunification with Western Germany, however, the entire set of nuclear power reactors were shut down, following a central political decision. Unfortunately, this successful destruction of the old-style reactors does not appear to have been creative, as the nuclear reactors have not been replaced by new and modern power plants, but rather by *other* types of old-fashioned power production facilities especially lignite-fired power plants (Högselius 2005b; also, see Case 4). This is highly regrettable, and it points to the need to combine destructive efforts with other related policy measures to make the destruction creative.

Another interesting example in the Baltic Sea region is Lithuania's nuclear power. Lithuania's attempts at destroying its nuclear power system is historically closely linked to its independence movement in the late 1980s, when the nuclear power reactors at Ignalina were viewed as symbols of Soviet occupation of the country. After the restoration of their independence, the Lithuanians became more positive towards the country's nuclear power plants (Dawson 1996). However, neighbouring countries, and the European Union in particular, remained extremely critical of Lithuania's Soviet-designed reactors, which were of the same type as the infamous Chernobyl reactors in Ukraine. In the negotiations about EU accession in the years around 2000, the EU made the shut-down of the Ignalina reactors a condition for EU membership. Hence, the first reactor was forcefully shut down at the end of December 2004, and the second and last reactor is hoped to be shut down by 2009.

The least successful country in the Baltic Sea region in the nuclear power case is Finland, which decided not to shut-down its old-style power plants in Loviisa and Olkiluoto. It has, however, recently opted for the construction of a *new* nuclear power reactor that will be more modern than the older ones but still basically belonging to an early-generation nuclear power paradigm.

Case 3: Replacing copper-wire telephone lines

Telecommunications is a sector that has undergone several radical technological shifts in its history, starting with the establishment of telegraph lines in the mid-19th century and currently adapting itself to Internet-based communications. The recent changes in relation to the Internet are so radical that the very concept of 'telecommunications' has become diffuse and difficult to grasp. However, a peculiar feature of the ongoing disruptive development is that the basic copper-wire infrastructure of fixed telecom networks has retained many of its original 19th-century characteristics.

Especially with respect to the 'local loop' or the 'last mile' that connects local exchanges to the user's premises, the copper-wire infrastructure with its origins in the 19th century remains dominant.

Over the long term, this will almost certainly lead to big problems, because the primitive physical properties of the copper wire make it difficult to use it for super-fast Internet access. From this perspective, it would appear desirable to substitute more modern types of cables for the copper wire, preferably by installing optical fibres to the end user ('Fibre To The Premises' or FTTP). Such a replacement would mean a powerful case of creative destruction of a century-old technology in telecommunications and would create virtually infinite opportunities for Internet users.

In the late 1980s and early 1990s, these ideas created a series of visionary debates in the world of telecommunications, and it appeared obvious that FTTP would soon be put into practice on a grand scale. In the Baltic Sea region, the most impressive and offensive visions that emerged against this background was the attempts in Eastern Germany in the early 1990s to replace the outdated telephone infrastructure inherited from the socialist era with FTTP, the most advanced telecommunications infrastructure available. The old copper-wire infrastructure in many parts of Eastern Germany was in such bad shape (and often it was even non-existent) that it was not deemed economically viable to renovate it, especially not in view of the emergent Internet era. Therefore, totally new lines would have to be created. DBP Telekom, the merged East-West German incumbent network operator, had in mind to implement optical fibre in the local networks all over the ex-GDR, which, if realized, would have indeed been a fantastic achievement.

However, the imagined technological revolution experienced severe competition with other societal goals. The Internet was at this time still unknown to most people, who hardly used any data communications services at all, and the priority therefore shifted to realizing the more basic needs of simple voice services. DBP Telekom was under severe time pressure, and in that situation it preferred to use almost exclusively very well-known (i.e., old) technologies and solutions. The risk of bringing in new technology was interpreted as being too high. Therefore, DBP Telekom in reality installed not optical fibres, but mostly new copper wire in the local loop. The initial grand plans were reduced to a pilot project that in the end connected 1.2 million homes and businesses in Eastern Germany with optical fibre (which can nevertheless be considered a substantial achievement for the time!) (Neumann and Schnöring 1994: 330).

The East German situation resembled a problematic point of departure for other post-socialist countries. However, East Germany was special among the ex-socialist countries in the sense that it had access to enormous amounts of funds for investment, originating in Western Germany. Other East European countries could never dream of any large-scale FTTP projects. At the same time, in most Western countries, the existence of well-kept copper-wire infrastructure and the substantial costs of installing FTTP meant that these countries remained hesitant to local loop fibre investments. This situation inspired traditional telecommunications equipment manufacturers, such as Ericsson, Siemens and Nokia, together with their incumbent partners among telecom network operators, to innovate seriously in data communications technologies based on the existing copper wire infrastructure. Creating copper wire broadband technology – more commonly known as DSL – turned out to be a very successful way to defend vested interests in the old-style telecom infrastructure. While it has always been obvious that FTTP would offer vastly superior bandwidth, DSL solutions appeared to be 'enough' for most users, at least for the time being. In particular, DSL appeared to be much cheaper than FTTP, and nowadays DSL is clearly the dominant broadband technology in most countries.

Countries where FTTP has been relatively successful include Japan, Sweden and the Netherlands (*Telecommunications International* 2005: 12). The driving force in the development in these countries seems to be the far-sighted visions for an information society with both private and public sectors prepared to invest over the long-term. In Sweden, for example, the creation of a fibre-network infrastructure has been compared to the country's historical success in establishing railway and electricity systems. However, most countries today are still very far away from a dominance of the optical-fibre local loop. While fashionable business districts and universities (with dense layers of Internet users who can pay for the corresponding service) have generally installed optical fibres in the local loop, normal residential areas in cities and especially in rural areas have generally no hope of getting connected with this modern technology. The main reason is still the enormous costs associated with installing FTTP infrastructure, besides the success of DSL and cable-TV solutions.

In other words, creative destruction in the local loop has generally not taken place, but the development has rather been one of creative accumulation, favouring old innovators which can continue to build on century-old technologies and competencies. It may appear paradoxical that such an old-style artefact as the twisted pair of copper wires has survived so successfully into the cyberspace era. Moreover, it risks leading to lock-in situations in the future, with many dominant service providers having invested heavily into improving the copper-wire infrastructure rather than replacing it.

Case 4: Putting an end to fossil-fuel energy production

Electricity and heat production through the combustion of coal, oil, gas and other fossil fuels pose a great threat to the environment. Traditionally, these threats were considered linked with the emission of sulphur and nitrogen oxides into the atmosphere, leading to the destruction of the landscapes in regions surrounding power plants. Environmental innovation managed to solve the lion's share of these problems during the last couple of decades; but in the 1980s, attention had focused on a new type of fossil fuel-based environmental concern: the green-house effect. Due to the enormous amounts of carbon dioxide emitted into the atmosphere by fossil-fuel power plants, it is becoming increasingly recognized that these technologies are something that we had better get rid of once and for all.

However, creative destruction in this field has turned out to be tremendously difficult. Fossil-fuel power production has deep roots and traditions in many countries, and it is often seen to guarantee domestic self-sufficiency of electric energy and heat. The available new power production technologies – such as solar energy, new-generation nuclear power and various forms of renewable energy – are, as a rule, politically highly controversial, and/or still technologically crude, and therefore expensive.

In many East European countries, the collapse of socialism was in this context seen as a major chance for enabling the shut-down of a vast number of old, heavily polluting fossil-fuel power plants, and replacing them with more modern forms of electricity production. An interesting case is Estonia, where the overwhelming public objection against the expansion of oil-shale-based power production became part of the national liberation movement in the late 1980s. Oil-shale power production was seen by the Estonians as a symbol of centralized Soviet power, and the heavy pollution and low energy economy of the corresponding power facilities seemed to embody the evil of the occupation power. A special feature of the Estonian power production system was also that it produced a vast over-supply of electricity, which was exported to neighbouring Soviet republics, such as Russia and Latvia. From the Estonian national perspective this was seen unnecessary, leading to an over-exploitation of its domestic natural resources and severe pollution which was not exported (Högselius 2006).

Notwithstanding the restoration of its national independence in the early 1990s, the new political leadership in the tiny republic of Estonia re-interpreted the status of the large Soviet-built oil-shale power plants. The export of electric energy to Russia, Latvia and other countries was seen as an important source of income, and this was considered more important than the environmental threats. Therefore, the power plants were not shut-down, but refurbished with modern environmental technology, and hence

preparing the facilities for a prolonged life in independent Estonia. Moreover, the continued existence at the domestic level of an oversupply of electricity most probably contributed strongly to halting a technological shift towards more modern power production techniques. In the end, the initial dreams of a radical technological transition and creative destruction in the field of energy have not come true in Estonia.

A related development can be observed in Eastern Germany. In the late 1980s, the East German energy system was based first and foremost on lignite (brown coal) and, to a lesser extent, on nuclear power. In contrast to Estonia, East Germany did not have any vast supply of electricity, but the collapse of the socialist economy after the fall of the Berlin Wall led to a dramatic fall in industrial electricity consumption. This made it possible to shut-down all nuclear power reactors in the country within a year (as described in the case study on nuclear power above), without risking electricity outages or facing an import need. Some of the oldest lignite-fired power plants were actually shut-down in this connection. Great visions flourished for a few years following the fall of the Berlin Wall, with the idea that radical political change combined with access to West German capital would enable a complete and radical renewal of the East German energy system. It was argued that East Germany had the potential to become the most modern and environment-friendly energy country in the world, if only the hopelessly outdated lignite power plants could be shut-down and replaced by alternative sources of energy (Högselius 2005b).

However, like in the case of Estonia, these visions were never realized. Political pressure was strong to retain lignite-based electricity production, as this sector was an important employer in East Germany and all competencies of the power companies was focused on lignite. Moreover, the existing structure of the East German electricity sector also fitted well with the West German experiences, where coal and lignite were similarly very important sources of energy. The unique opportunity to radically create something new, while decommissioning the old system, was in the end seen as too risky in several dimensions. Instead, all efforts were directed towards refurbishing the remaining lignite-fired power plants, applying modern environmental and control technologies, and there were even some new lignite-based power plants being erected. The technological trajectory from the GDR times was thus not given up, but rather strengthened.

4. Discussion and conclusion: can we learn to destroy?

The preceding sections have investigated four challenging cases of creative destruction efforts in a variety of European countries. Let us now return to the question of whether some countries can be considered better than others at managing creative destruction, and in particular, whether the Eastern

countries in the Baltic Sea region have managed to take advantage of their lack of inertia for leveraging this process.

The most obvious conclusion that can be drawn from the above case studies is that it has been tremendously difficult to manage creative destruction all over the Baltic Sea region, including both Eastern and Western countries. Moreover, it is hardly possible to draw any clear conclusion concerning which part of the Baltic Sea region – East or West – has been more successful at managing creative destruction.

As could be expected, the main difficulties in the West are closely related to the high level of development and diffusion of already existing, older technologies, which means that these countries have a lot to lose when facing the challenge of radical technological change. Therefore they often hesitate to jump into the new technological paradigms even if they recognize the strengths of the new technology and do have the necessary competencies, financial resources, institutional capabilities, etc. The case of Internet banking illustrated this dilemma in a clear way. The inertia in already advanced countries can be extremely strong, as in the case of nuclear power, where in some countries clear political decisions were made to get rid of the outdated technology, but with no result. Politics was here the prisoner of a vast techno-political complex and its momentum.

In the case of telecommunications, the West seems to have missed a chance to install optical fibres to the end user (FTTP) on a grand scale, leaving the victory to traditional copper lovers such as old equipment suppliers and incumbent network operators, in which the 19th century-based copper wire has now been updated to DSL. On the surface, this appears to be a matter of the enormous costs of the more visionary FTTP technology. However, some governments, notably in Sweden, have shown that it is possible to support FTTP diffusion through intricate public-private partnerships or other institutional mechanisms. East Germany, too, formulated extremely brave goals with regard to telecommunications following Germany's reunification. And although the initial vision of installing optical fibres to all users in East Germany was not realized, the pilot project of 1.2 million users can in itself be regarded as relatively successful.

In the East, the major problems are typically of a somewhat different kind as compared with the West. The removal of historical inertia in many sectors following the collapse of socialism made it more tempting here to try out a creatively destructive path, but this circumstance was often counterbalanced by problems relating to funding, as illustrated in the telecommunications and fossil-fuel cases. The weak financial status of the 'new' countries in the East shortened the visionary horizons of policymakers and other actors in these cases.

On the other hand, it is in the East that we actually do find some of the most interesting success stories when it comes to getting rid of old junk. For example, the Eastern part of the Baltic Sea region is now almost totally liberated from old-style nuclear power, and in the Baltic states consumers hardly have an idea anymore of old-style banking methods such as cheques and giros. The East has thereby actually managed to get rid of technological antiquities that will probably continue to plague most Western countries for decades or generations.

Notably, however, the success in the East cannot be described as a result of domestic policymaking or state action. Internet banking inspired, rather than was inspired by, policymakers; and nuclear power shut-down was managed per decree by foreign political bodies such as West Germany (in the East German case) and the EU (in the Lithuanian case). This seems to point the need to approach the challenge of creative destruction management as a transnational political issue rather than as an isolated domestic challenge.

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