This paper identifies four different periods (1848, 1890s - partly also 1930s - and neoliberalism today) where the same tendencies recur: a Rise of Academic Monoculture (of esoteric knowledge), Re feudalization (tendencies towards a plutocracy), Crisis and Renewal. These sequences and their recurrence define the changing relationship between economics and the public sphere, and it is only through activities in the public sphere that any renewal will take place.
After receiving the National Bank of Sweden’s 1973 ‘Nobel’ Prize in economics – shared with development economist Gunnar Myrdal – Friedrich von Hayek (1899-1992) held an unusual dinner speech where he quite explicitly criticized the prestigious prize he had just received: ‘...if I had been consulted whether to establish a Nobel Prize in economics, I should have decidedly advised against it. One reason was that I feared that such a prize ... would tend to accentuate the swings of scientific fashion’. Hayek believed that economics was different than other sciences, and his 1973 speech shows a degree of humility towards the complexities of economics which, in my view, differs profoundly from today’s professional attitudes.¹

An insight from a 1952 book by Hayek strengthens the argument: ‘Never will man penetrate deeper into error than when he is continuing on a road which has led him to great success’.² In other words: when being right and successful, mankind will ‘overshoot’ into error.

In this note I shall argue that the origins of what colleague Mark Thoma refers to as the ‘Great Disconnect’ between professional economics and

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¹ Friedrich August von Hayek’s speech at the Nobel Banquet in Stockholm, December 10, 1974. Your Majesty, Your Royal Highnesses, Ladies and Gentlemen,

Now that the Nobel Memorial Prize for economic science has been created, one can only be profoundly grateful for having been selected as one of its joint recipients, and the economists certainly have every reason for being grateful to the Swedish Riksbank for regarding their subject as worthy of this high honour.

Yet I must confess that if I had been consulted whether to establish a Nobel Prize in economics, I should have decidedly advised against it. One reason was that I feared that such a prize, as I believe is true of the activities of some of the great scientific foundations, would tend to accentuate the swings of scientific fashion. This apprehension the selection committee has brilliantly refuted by awarding the prize to one whose views are as unfashionable as mine are. I do not yet feel equally reassured concerning my second cause of apprehension. It is that the Nobel Prize confers on an individual an authority which in economics no man ought to possess. This does not matter in the natural sciences. Here the influence exercised by an individual is chiefly an influence on his fellow experts; and they will soon cut him down to size if he exceeds his competence. But the influence of the economist that mainly matters is an influence over laymen: politicians, journalists, civil servants and the public generally. There is no reason why a man who has made a distinctive contribution to economic science should be omniscient on all problems of society - as the press tends to treat him till in the end he may himself be persuaded to believe.

One is even made to feel it a public duty to pronounce on problems to which one may not have devoted special attention. I am not sure that it is desirable to strengthen the influence of a few individual economists by such a ceremonial and eye-catching recognition of achievements, perhaps of the distant past.

I am therefore almost inclined to suggest that you require from your laureates an oath of humility, a sort of hippocratic oath, never to exceed in public pronouncements the limits of their competence. Or you ought at least, on conferring the prize, remind the recipient of the sage counsel of one of the great men in our subject, Alfred Marshall, who wrote: ‘Students of social science, must fear popular approval: Evil is with them when all men speak well of them.’ http://www.nobelpize.org/nobel_prizes/economics/laureates/1974/hayek-speech.html

The Public Sphere can be better understood by taking a closer look at Hayek’s propositions. Observing the economics profession over time, it indeed appears to be subject to cycles of fashion as Hayek suggests: apparent theoretical success overshoots the scientific fashion into error and irrelevance.

Other economists have contributed, from different angles, to describing this ‘overshooting’ phenomenon. Norwegian-American economist Thorstein Veblen (1857-1929) suggests that knowledge exists on two different levels. Highly abstract and *esoteric* knowledge, like that of high priests, carries much prestige, but is – in practice – often fairly useless. On the other hand there is *exoteric* knowledge – useful knowledge – based on facts and experience, that carries little prestige. Using Veblen’s terminology, we can argue that Hayek’s overshooting of scientific fashion corresponds to Veblen’s idea that irrelevant education may *contaminate healthy instincts* of useful and exoteric knowledge.

In his contribution Craig Calhoun importantly describes ‘a social science turned in on itself’. Francis Bacon (1561-1626) describes this process of science turning in on itself very well, and also how such an inward-looking science may lead to the decay of sound knowledge: ‘Surely as many substances in nature which are solid, do putrefy and corrupt into worms, so is the propriety of good and solid knowledge to putrefy into a number of subtle, idle, and unwholesome questions with no soundness or goodness of quality. This kind of degenerate learning did chiefly reign amongst the schoolmen (i.e. Scholastics), who, being shut up in the cells of monasteries and colleges, and knowing little history, did, with no great quantity of matter, spin out unto us laborious cobwebs of learning that are admirable for their fineness of thread and work, but of no substance or profit’.³

Canadian economist Harold Innis (1894-1952) suggests that scientific fashions of what Veblen called esoteric and exoteric knowledge follow a pattern, and in his scheme it becomes clear that scientific fashions may be driven by what Veblen dubbed ‘vested interests’. I shall argue that sectors of the economies may actually be collecting rents from irrelevant economic theories. Without reference to Veblen, Innis sees that abstract science, communicated in *Latin*, gets more and more abstract, monopolizes knowledge and enters into alliances with the political elites (with Veblen’s *vested interests*).⁴ Today’s *Latin* would be mathematics, and today a *de facto* alliance exists between mainstream (neo-classical) economics and the financial sector.

Since mainstream economics is so abstract that it does not distinguish between the real economy and the financial sector – tending to see the financial sector merely as a mirror image of the real economy – this theory does not perceive the destructive forces that can be created when the financial sector rather than being in a constructive symbiosis with the real economy – to a mutual benefit – becomes a parasite eating away at the real economy as we see for example with the deepening crisis in Greece today.\(^5\) Previously economic theories from left to right saw the need to keep the financial sector under control. In volume three of *Das Kapital* Karl Marx explains financial crises, Lenin was of the opinion that the financial sector taking over the economy would be the last stage of capitalism, conservative economists like John Maynard Keynes and Joseph Schumpeter had theories of finance and crises, and Hitler’s economists distinguished between *schaffendes Kapital*, capital that created wealth, and *raffendes Kapital*, capital that only grabbed value without creating it. The best theory of the role of financial capital was written by Rudolf Hilferding, a social democrat and Austrian Jew who was killed by the Gestapo.\(^6\) Today we are in the extraordinary situation that these economic theories – covering the whole political spectrum – have virtually disappeared from practical use. The West has failed to make theoretical sense of the horror chambers of the 1930s and 40s: that fascism, communism, and social democracy in effect produced a collusion to strengthen the real economy by bringing the financial sector under control. The relationship between economics and the public sector is so poor at the moment because the diversity of economic theories that once existed – and competed for attention – has virtually disappeared. In practice there seem to be no alternatives to mainstream theory, one which no longer differentiates the financial economy from the real economy as was once common practice.

As I see it, the financial sector is presently collecting huge rents from this situation, i.e. from a type of economic theory which is not able to distinguish the financial sector sufficiently from the real economy. In the same way corporations may collect huge rents when natural monopolies – like telephone companies in some countries – are privatized in the name of ‘perfect competition’. Assumptions in general, and assumption-based


rents in particular, are rarely discussed in economics. But, contrary to its own ideals, mainstream economics has become an important tool for rent-seeking.

In Harold Innis’ scheme, resistance to the alliance between the ruling economic paradigm and the elites builds up among *the Vernacular*, i.e. those who do not read or write *Latin*. A great disconnect is slowly created by a perceived misfit between the *Latin* theory of the ruling class and their high priests and reality as perceived by common people, by the *Vernacular*. A simultaneous overthrow of power and of science (of the vested interests and their overly abstract *Latin* science) may take place after a shock to the system, e.g. a financial crisis. In this paper I shall provide examples of historical instances – the French Revolution, the 1848 revolutions, and the financial crisis of the 1930s – where esoteric knowledge has created crises, and how these crises were only solved by resurrecting alternative, sometimes near-defunct, paradigms of knowledge.

A fascinating aspect of Innis’ vision of the cyclicality of science is that he sees Western Civilization again and again being saved by knowledge that for a time only survives in the periphery, by near-defunct theoretical paradigms. To take an example from today’s financial crisis: US economist Hyman Minsky (1919-1996) was for a long time a lonely voice when he claimed that ‘it’ – a severe financial crisis – could happen again. However, at the April 2012 Minsky conference held in New York, economists Joseph Stiglitz and Paul Krugman and the main regulators from both the United States and Europe were present attempting to learn from Minsky’s insights. As Innis would have predicted, Minsky’s economics had only survived in the academic periphery: at the University of Missouri - Kansas City, and at the Levy Institute at Bard College in New York State.

The Innis pattern of scientific cyclicality has a parallel in Hyman Minsky’s ‘destabilizing stability’, one of the mechanisms that lead up to a financial crisis. As economic booms and good times last for long periods, bank routines – and the routines of economists – become less and less cautious, until one day the loans that should not have been granted – and the extremely abstract theories that should not have been produced – default in large numbers and – in the case of economics – important real life economic factors that have been assumed away from the theoretical edifice return with a vengeance and produce economic crises that could not be foreseen by the tools employed by the mainstream of the profession.
In my view one important result of the mono-high-level of abstraction, although guised as ‘scientific’, is that the economics profession fails to perform its public function. Contrary to what is generally assumed, presently economics is in practice far from apolitical, its set of assumptions are in practice sources of large rents. Examples of sectors which receive assumption-based rents are the financial sector and privatized firms that are close to natural monopolies.

Two final introductory remarks will refer to Hayek’s hint about ‘economics as a special case’ of science: The Law of the Instrument and a Whig conception of the profession’s own history.

Craig Calhoun correctly claims that ‘problem choice is fundamental’ to how a social science develops. But behind explaining the choice of problems lies the choice of tools, and economics today is to a large extent driven by the choice of mathematical tools and models rather than by the choice of problems. The Law of the Instrument – that if all you have is a hammer, you will spend your career looking for things that resemble nails – is certainly at work in economics, severely limiting the professional horizon.

A further important complication in economics is how a Whig Conception of History rules in the history of economic thought. The Physiocrats are, for example, seen as the exclusive forerunner of the science, whereas as a historical fact Anti-Physiocrat thinking won most, if not all, of the battles for economic policy. One observation of the Whiggish nature of the history of economic thought even precedes Herbert Butterfield’s 1931 volume on the subject. English historical economist William Ashley wrote in 1920 that: ‘…..any idea – instead of being judged by its relevance in a given context – is either hailed as a surprising early anticipation of a healthy neoclassical economic principle, or as an example of hopelessly ill-conceived theories’.

These two proclivities of economics – the Law of the Instrument and the Whiggish Conception of the history of economic thought – today combine into a strong déformation professionnelle of the economic mainstream. This makes it exceedingly difficult for alternative theories – the

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importance of which is so crucial to Innis’ conception of how science repairs itself cyclically – to survive, even in the academic periphery. Society has rightly made huge investments in genetic banks for plant seeds that may once become useful, however similar seed banks of intellectual history of economics are sorely neglected.

Conceiving of Economics as a Problem-Solver.

One way to attempt to make economics more useful to the public sphere would be to compare this relationship to the relationship between the pharmaceutical profession, the medical profession, and the patient. The pharmaceutical industry produces remedies for a wide variety of conditions, and the medical profession provides diagnosis matching the medication with the need of the patient. Sophisticated modern medicine distinguishes between a wide variety of illnesses, conditions and syndromes, and there is an implicit understanding that the interplay between the three agents – pharmaceutical industry, doctor and patient – is a complex one. Most of us consider the present state of affairs a great progress from the cure-all or ‘patent medicines’ that a free an unregulated market allowed to flourish in 19th century United States.

Politicians and medical doctors are both professions which we trust to make decisions on our behalf, and in a democracy we tend to have a degree of choice with politicians as well as medical doctors. Different people trust different medical doctors and different politicians, and we tend to see the presence of a choice as part and parcel of a free and democratic society. The quality of society depends on the quality of its politicians, but also the other way around: ‘Liberty cannot be preserved without a general knowledge among the people’, as the 2nd US President John Adams wisely said. Quacks selling ‘patent medicine’, on the other hand, could only succeed with an uneducated people.

The task of the economics profession can be seen as that of providing options to our politicians much in the same way the pharmaceutical profession provides options to the medical profession. In both cases, it is possible to apply, with due care, Hippocrates’ saying that ‘the one who cures is right’. The Great Depression provided a battle of ideas, and for the next fifty years there was no doubt in anybody’s mind that John Maynard Keynes – and those with similar ideas – had cured the world economy during the Great Depression. Today individual economists – like Joseph Stiglitz and Paul Krugman – provide ideas that are alternative to those of the mainstream, but no critical mass seems to be created in opposition to what both Stiglitz and Krugman have referred to as the economic suicide of Europe.
In this essay I shall argue that the public interest is best preserved by methodological diversity, by having a variety of economic methodologies, offering alternative and competing approaches, at its disposal. I shall use 19th century trade policy in the United States as an example illustrating how two competing economic theories – two alternative world views – provided American politicians with different options, and how the democratic process produced a near-perfect timing of the switch from protecting the infant US industry to a regime of free trade. I shall further argue that the present lack of theoretical diversity – a theoretical monoculture in economics – is an important obstacle making it very difficult to solve the crises looming today. In the 19th century US functional theoretical diversity produced wealth, while today’s nonperforming academic monoculture produces shrinking wealth.

But first it is necessary to look at the different types of economic theory the modern world has had at its disposal.

Types of Economic Theory: Cyclicality and the Revolts of 1848, the 1890s, and (perhaps) now.

Physiocracy vs. Anti-Physiocracy

US economist Wesley Clair Mitchell (1874-1948) – long time Research Director of the National Bureau of Economic Research and one of its founders – published a two-volume work with the title *Types of Economic Theory*. In Europe, the best-selling book in the history of economic thought was for a long time that of Austrian economist Othmar Spann (1878-1950), where the English (rather than the US) edition also carried the title *Types of Economic Theory*. This idea that economics came in different types – with different filiations, to use Schumpeter’s term – hails back to 1782 when a book grouped the economics profession into either Physiocrats or Anti-Physiocrats.

In order to better understand the relationship between economics and the public sphere, I find the distinction between Physiocrats and Anti-Physiocrats still extremely useful. The interplay between the two types

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of theory – one assuming markets and nature fix all problems, while the other sees the need for policy and activism – and their timing and sequencing is crucial in order to understand our economic past, present, and future. Usually valid arguments can be found in favour of both approaches, the passivistic laissez-faire Physiocracy and activist Anti-Physiocracy. Latecomer nations have all typically resorted to Anti-Physiocratic, hands on, economic policies, while the economic hegemon may, for a while, live with Physiocratic values. However, as economic decay sets in, it can only be countered with new Anti-Physiocratic and anti-oligarchic measures. In a dialogue between the two approaches – where context becomes a key variable – optimal political solutions may be found. A main problem here is – as already mentioned – that today’s textbooks in the history of economic thought virtually unanimously trace the lineage of the profession back to the Physiocrats, while as a matter of historical record the Physiocrats lost all major historical battles except the one in today’s economics textbooks.

In the history of US economic policy Thomas Jefferson, a slave-owner, represents the Physiocratic tradition, while Alexander Hamilton, who grew up in a Caribbean slave society, represents the activist Anti-Physiocratic tradition. Until well into the 20th century, however, US academic economic theory traditionally stood firmly in the Anti-Physiocratic, non-mechanistic tradition which I refer to as The Other Canon of economics. In the American Civil War the South typifies the Physiocratic tradition, a rural base in favour of free trade, whereas the North represents the more urban-based tradition, with republican values, in favour of temporary industrial protectionism. Abraham Lincoln’s economic views were those of a typical Anti-Physiocrat.

I would argue that today’s economic theory has lost key features of what built Western civilization, both of the Renaissance and of the Enlightenment. The core of the Renaissance was innovation: the magna facere that created great innovations in art and in the production of everything from weaponry to irrigation canals was a way of thinking big that went far beyond profit-making. What came to characterize the Western economy from those of the rest of the world was that building organizations did not stop when the owner had enough money to feed his family. Renaissance magna facere was a virtue that went far beyond greed, and already in the 1200s the wealth of Florence was seen as emerging from a ben

commune, a synergic common weal that was in itself a unit of analysis. Today society as a unit of analysis has largely been lost in economics.

Renaissance Florence also understood the need to prevent speculation, a skill which is obviously lost today. In Florence transporting food out of the city was prohibited, as this could feed speculation. Indeed, the spark that created the French Revolution was precisely the lack of such a typical Anti-Physiocratic legislation, which led to food shortage in Paris. Renaissance cities also managed to create what John Kenneth Galbraith dubbed a balance of countervailing power. The Florentine government – the signoria – consisted of nine members, representing different professions, and only one of them represented the financial sector. Renaissance cities also frequently rotated their elected administrators to prevent corruption, and Florence specifically cultivated its urban culture – of manufacturing and trading – by keeping the producers of raw materials, the big land owners, away from any political power. In the world of today we still see how the absence of a manufacturing sector is part of a pattern of undemocratic governments, even if the raw material is as valuable as oil.

Two key features of the Enlightenment are also lost in today’s economics: the ability to build classification systems, as Linnaeus did, and to understand the limits that need to be set for private greed. As I argue in my 2007 book, a key feature of mainstream economics is its inability to qualitatively distinguish between economic activities. The accuracy of neo-classical economics is a direct result of its failure to make qualitative distinctions. We all understand that if all medical doctors of New York are put in one country and all the people who wash the floors of New York hospitals in another, we get one rich country of medical doctors and one poor country of cleaning ladies. This common-sense proposition is unfathomable in Ricardian trade theory, because world trade is modelled as the bartering of labour hours, all assumed to be of the same quality. This was the English way of trying to convince the colonies to stay with their comparative advantage in being poor and ignorant, a bluff the United States never accepted. Now this same theory is boomeranging and making the West poorer and Asia richer.

With the coming of neoliberalism the key Enlightenment debate on the limits of self-interest – a debate which lasted virtually through the whole

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of the 18th century – was lost. Having unlearned the wisdom that came out of this debate, the present discussion more often than not totally misses the point by discussing greed per se as an evil. The conclusion of the Enlightenment debate was boiled down to one sentence by Milanese economist Pietro Verri in 1771: ‘...the private interest of each individual, when it coincides with the public interests, is always the safest guarantor of public happiness’. In other words, greed – or *magna facere* for any reason – is good as long as the end effect contributes to making the economic pie larger. With neoclassical economics the public interest – society – ceased to exist as a unit of analysis. This opened up for today’s view that all greed is good, even the present greed of the financial sector which creates huge private wealth while shrinking the real economy to the detriment of the public interest.

If we compare the Physiocratic side of Adam Smith’s view of the nature of Mankind with Abraham Lincoln’s, we get an important contrast between Physiocrats and Anti-Physiocrats, a focus on barter (Physiocracy) or on innovation (Anti-Physiocracy):

‘The division of labour arises from a propensity in human nature to.. truck, barter and exchange one thing for another..It is common to all men, and to be found in no other race of animals, which seem to know neither this nor any other species of contracts... Nobody ever saw a dog make a fair and deliberate exchange of one bone for another with another dog.’ Adam Smith, *Wealth of Nations*, (1776).

‘..Beavers build houses; but they build them nowise differently, or better, now than they did five thousand years ago..Man is not the only animal who labours; but he is the only one who *improves* his workmanship. These improvements he effects by Discoveries and Inventions....’ Abraham Lincoln, Speech of the 1860 Presidential Campaign.

At its nucleus, mainstream economics still essentially describes Adam Smith’s view of Mankind as savages who have learned to barter, not Lincoln’s and Schumpeter’s view of savages who has learned to innovate. The tools the profession has decided to use in large part explains why this is so. Today, in an increasingly complicated setting, the world is mostly ruled by the crudest of economic models.

In his 1899 article ‘The Preconceptions of Economic Science’ Thorstein Veblen uses Physiocracy as ‘the point of departure in an attempt to trace that shifting of aims and norms of procedure that comes into view in the
work of later economists when compared with earlier writers'. Veblen describes Physiocracy as being animistic and hedonistic, dominated by a belief in *ordre naturel*, and contrasts it with his own evolutionary approach. While our 1782 taxonomist of economists placed Adam Smith among the Anti-Physiocrats, to Veblen ‘In Adam Smith the two (types of economics) are happily combined, not to say blended; but the animistic habit still holds the primacy...’ A prime example of the animistic side of Adam Smith that Veblen refers to, is of course a belief in an ‘invisible hand’ that will order economic life harmoniously if only Mankind would entrust its fate to it. But this term was only mentioned once in Smith’s *Wealth of Nations*, and then only coming into force after a massive dose of policy intervention, *The Navigation Acts*, of which Adam Smith greatly approves, had led the English to prefer English goods to foreign imports. So Adam Smith is indeed a blend of the two types as Veblen says.

Werner Sombart, the important economist of the German Historical School, describes this fault line between the two types of economics in different terms, as static *passivistic-materialistic* (Physiocracy) vs. dynamic *activistic-idealistic* economics (Anti-Physiocracy). Originating with the *ordre naturel* of the Physiocrats the former – today founding economics on the metaphor of equilibrium – is individualistic, focuses on trade rather than on production, and dismisses institutions and social synergies such as in the concept of ‘society’. The latter focuses on production of knowledge, goods and services, on production rather than trade, and anchors its analysis of economic development in institutions and social synergies, sometimes using the human body as the basic metaphor for society. One fundamental problem of today’s economic debate is that the vast majority of participants come from the passivistic-materialistic tradition which – since Adam Smith – has largely exogenized production and unlearned Werner Sombart’s definition of capitalism as consisting of 1) the entrepreneur, 2) the modern state, and 3) the industrial system. The practical consequences of the disappearance of this Other Canon of economics are, I would argue, highly dramatic, both in the Third World and for the crises the West now faces.

German economist Gustav Cohn’s *Finanzwissenschaft* provides an example of Sombart’s activistic-idealistic approach to economics. Cohn develops a theory of stages of development of the state. In his work human

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17 Ibid., p. 98.
welfare is clearly a product of conscious human will, not of any invisible hand of Providence as in Physiocracy. ‘The delusion that security of life and property, the productivity of labor, and the consequent possibility of acquisition and enjoyment, and even the elevation of the spiritual and the ennobling of the moral nature - that these goods came to Man in the gift of gratuities, is itself a proof of the advanced stage of culture which the greater part of Europe at present occupies. As the grown man has long since forgotten the pains it cost him to learn to speak, so have the peoples, in the days of their mature growth of the State, forgotten what was required in order to free them from their primitive brutal savagery.’

‘In point of fact, how significant was the involuntary testimony which the eighteenth Century, with its repudiation of the historic State and its yearning after the primordial state of nature, bore to the blessings of the inherited culture which it ungratefully enjoyed.’ 19 This description – written well over 100 years ago – also fits the neoliberal zeitgeist that came to dominate the world after the 1989 fall of the Berlin Wall. The West ungratefully enjoys the result of centuries of wise economic policies, and now – in the spirit of the ordre naturel of markets – does its best to undo much of it, including the welfare. Again today a ‘repudiation of the State’ and ‘the end of the nation-state’ – based on English classical and neoclassical economics – are mixed with a ‘yearning after the primordial state of nature.’ ‘If we just managed to get rid of the state...’ appears to be a Tea Party credo.

The Revolt of 1848.

Ben B. Seligman’s Main Currents in Modern Economics 20 is an unusual text in the history of economic thought in that it is not organized around the history of mainstream economics – normally a requirement for books that aim at high sales – but rather traces the history and fate of the dissenters, among them the American traditions. This may be the reason why John Kenneth Galbraith in his foreword to the second edition of Seligman’s book recognizes that – in spite of its ‘enormous scholarship, wholly acceptable to the diligent layman’ – it is ‘the most overlooked book in the last ten or twenty or fifty years’ 21.

Seligman’s history of economics begins in the 1870s with the revolt of the German and English historical schools against the rigidities of the clas-

sical school, which peaks in the late 1890s (Volume 1: *The Revolt Against Formalism* in the paperback edition), a movement which is countered by *The Reaffirmation of Tradition* (the title of volume 2) through marginalism – which ends up reinforcing the classical school – and further developed into *The Trust Toward Technique* (title of volume 3). In volume 2, where the first section starts with a chapter entitled ‘From Marginalism to Libertarianism’, Seligman shows his ability to recognize the long lines of history, where the qualitative understanding in the Austrian economics of Karl Menger degenerated into Mises’ ‘libertarianism in extremis’.  

On Seligman’s huge intellectual canvas, US economist Thorstein Veblen – who today is seen as a lone figure in economics – becomes a participant in a fundamental intellectual revolt against the formalism and sterility of the classical school of economics and its Physiocratic roots. Smith and Ricardo’s individualistic teachings, focusing on markets and human bartering, yielded to new approaches emphasizing human creativity and production where the individual is imbedded in a society. For the members of the German historical school, as well as for Veblen, economic theory was anthropocentric in that it placed Mankind – both as individuals and as society – at centre stage of economics. In today’s theory market equilibrium is at the core, while human beings are reduced merely to a factor of production. ‘The plasticity of the human personality was acknowledged, and Man became the creative factor in both the physical and social environments. A relationship of complete interpenetration between man, society and the environment was seen as the basis for change and growth’, as Seligman puts it in his analysis of Veblen. In this sense, Veblen’s economic dynamics is, at its very core, closely related to that of Joseph Schumpeter.  

Seeing this in a larger context it seems reasonable to trace the movement for change in economics back to the events following the massive financial crisis of 1847 and the political events of 1848, with revolutions in all large European countries with the exception of England and Russia. This marked the end of a period of growing influence of David Ricardo’s 1817 *Principles of Economics and Taxation*. With hindsight it can be argued that Ricardo’s influence, the first time around, peaked with the 1846 Repeal of the Corn Laws. John Stuart Mill’s 1848 *Principles of Economics* – the canonical textbook which took over after Ricardo’s *Principles* – opened for a much broader and philosophical base of economics than what Ricardo had given his pupils. Mill’s recanting on free trade as a uni-

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universal principle, opening up for ‘infant industry protection’, and his call for virtually confiscatory inheritance taxes are but two sometimes ignored aspects of the economics of the great liberal Mill.

In addition to Mill’s canonical *Principles of Economics* in England, the revolutionary year 1848 also gave birth to two trend-breaking books by Continental European economists, and with them also to two schools of economic thought. Bruno Hildebrand (1812-1878) published *Die Nationalökonomie der Gegenwart und Zukunft* 25 (‘Economics of the Present and the Future’), which came to be the founding work of the German Historical School of Economics, 26 and in the same year Karl Marx and Friedrich Engels published *The Communist Manifesto*, the founding work of Marxism. To illustrate the diversity of the persons involved in this theoretical revolt, Hildebrand – not at all a revolutionary – had to flee Germany for Switzerland, while Marx was so radical that he had to flee to England.

During the 19th century German and US economics were in close affinity in opposition to English theory, forming an important root of the old American Institutional School. Two influential pairs of US-German thinkers were Friedrich List (1789-1846) and his less well-known but almost equally important US inspirer Daniel Raymond (1786-1849) 27, and Henry Carey (1793-1879) and Eugen Dühring (1833-1921) who vocally supported each other’s work.

The activities and publications (188 volumes) of the *Verein für Sozialpolitik* (‘Association for Social Policy’), active from 1872 to 1932, were a focal point of the theoretical revolt. The association included both politically conservative and radical economists working together towards a united goal of ‘civilizing capitalism’.

**The Revolt of the 1890s.**

The 1890s saw what perhaps are the three peak performances of the revolt against economic formalism, one each in Germany, England, and the United States. First out was the *Verein’s* founder Gustav Schmoller’s in his 1897 inaugural speech as Rector of the University of Berlin 28, which laments that ‘the human idealism of Adam Smith’ had degenerated into

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25 Frankfurt: Literarische Anstalt, 1848.
26 It is reasonable to classify Friedrich List as representing a proto-historical school of economics.
‘the hard mammonism of the Manchester School’ and decries the naiveté of both laissez-faire and communism as ‘twins of an ahistorical rationalism’. Schmoller was the most influential German economist at the time.

The second work of revolt in the 1890s, Cambridge economist Herbert Foxwell’s 110 page introduction to a book by Anton Menger, also distances itself from both political utopias, holding David Ricardo’s work responsible for the political ills both to the political right and to the political left. Thorstein Veblen ironically mocks Ricardian context-free economics: ‘A gang of Aleutian Islanders slashing about in the wrack and surf with rakes and magical incantations for the capture of shell-fish are held, in point of taxonomic reality, to be engaged in a feat of hedonistic equilibration in rent, wages, and interest.’ Foxwell’s criticism of abstract Ricardian theory has Veblen’s punch, but in a more polished form: ‘Ricardo, and still more those who popularized him, may stand as an example for all time of the extreme danger which may arise from the unscientific use of hypothesis and social speculations, from the failure to appreciate the limited application to actual affairs of highly artificial and arbitrary analysis’. These are words that are more relevant today than they have been for a long time.

The third key element in this theoretical revolt of the 1890s – in addition to Schmoller (1897) and Foxwell (1899) – was Thorstein Veblen’s *Theory of the Leisure Class* (1899) in the United States.

Also less rebellious economists were clearly influenced by the changing paradigm of the 1890s, towards a less abstract and more dynamic type of economics. The next canonical textbook in economics after Mill’s was Alfred Marshall’s *Principles of Economics*, first published in 1890. There is no mention of Smith and Ricardo, nor of Mill, when Marshall – the founder of neo-classical economics – lists his main influences. The two kinds of influences that have affected the book ‘more than any other’, says Marshall in his introduction to his *magnum opus*, ‘are those of biology, as represented by the writings of Herbert Spencer, and ‘of history and philosophy, as represented by Hegel’s *Philosophy of History*...’. In the same year, 1890, Marshall’s Cambridge colleague John Neville Keynes – father of John Maynard Keynes – published his *Scope and Method of Political Economy*, a book also very much influenced by con-

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30 *The Right to the whole Produce of Labour*, London: Macmillan, 1899. Foxwell’s introduction is downloadable on [www.otherecanon.org](http://www.otherecanon.org)
31 Foxwell in Menger, p. xli.
tinental European and evolutionary thinking. Under the heading *The conception of political economy as an ethical, realistic, and inductive science* Keynes senior comments that this school originated in Germany, but that ‘a rising school of economists in the United States ... expressly repudiate the assertion that the new movement is exclusively a German movement’, and that this type of theory also finds its ‘very forcible expression’ there. I have argued that from their inceptions in the late 19th century, both Austrian and neo-classical economics have lost their original evolutionary dynamics, becoming increasingly static and increasingly irrelevant with increasingly higher levels of abstraction.

It is difficult to appreciate the enormous influence the evolutionary thinking of English philosopher Herbert Spencer (1820-1903) had both in England and the United States during his lifetime. Writing on the subject of evolution before Charles Darwin, but later also influenced by him, Spencer saw the evolutionary process as a universal law, applying to the stars and the galaxies as much as to biological organisms, and to human society as much as to the human mind. He is now most famously associated with the term ‘the survival of the fittest’. However, it is important to note that it was entirely possible to agree with Spencer’s evolutionary view without subscribing to ‘the survival of the fittest’. Andrew Carnegie was a great admirer of Spencer, but gave away fortunes to constructing public libraries across the United States in an effort to *counteract* this tendency. Veblen was, of course, in the same camp: a tendency to survival of the fittest needs to be met by policy.

It should be noted, however, that as with Mill, and in contrast with today’s mainstream economics, Spencer’s evolutionary utilitarianism was a moral – but in Spencer’s case dismal – science. Spencer’s biology was strongly adaptationist, making use of both inheritance and acquired characteristics, along the lines of Jean-Baptiste Lamarck. In this, but not in his social Darwinism, Spencer’s influence lingers on in today’s evolutionary economics.

34 J.N. Keynes, page 21.
To sum up: The science of economics may be seen as being subject to the same mechanism of ‘destabilizing stability’ as Hyman Minsky describes as a cause for financial crisis. In the case of financial crisis, long periods of economic stability produce easy credit, which with time creates instability and systemic risk, even with a small economic downturn. In the case of economics, long periods of economic stability create a belief that a Physiocratic approach of deregulated market – which may work well for a while – will forever solve all problems. Both the French Revolution and the European Revolutions of 1848 were results of an overdose of Physiocratic thinking, and both cases produced a return to Anti-Physiocratic – active – economic policies. The present financial crisis falls in the same category of an overdose of Physiocratic de-regulation, the famous ‘flaw’ that Alan Greenspan discovered was a typical Physiocratic flaw: the market, if left alone, did not produce automatic harmony, but financial collapse. It remains to be seen if – and how fast – Anti-Physiocratic regulatory measures can be put back. Strong vested interests wish to prevent it.

**Economics as Functional Diversity: The Case of 19th Century US Trade Policy.**

The science of economics traditionally has provided a wide range of different theories which have yielded very different recommendations. For example, as regards the question of free trade, at least since 1776, two different theories, or remedies, have been offered to nations that wanted to get rich, instant free trade based on comparative advantage (let us call this Adam Smith) vs. industrialization and then gradually opening up for free trade (we could call this Alexander Hamilton).

Both these theories have been present since US Independence, an event which coincided with the publication of Adam Smith’s *magnum opus* ‘The Wealth of Nations’. The first US Secretary of the Treasury Alexander Hamilton – who has already been mentioned and whose portrait adorns the 10 dollar bills – set the direction for US trade policy in his 1791 *Report on the Manufactures*. Hamilton had read Adam Smith, but he still disagreed with him. He thought a) that there were certain factors that Adam Smith’s theories did not consider, e.g. that economic activities are qualitatively different, and b) that Adam Smith’s England was in a different position than the United States: i.e. that context mattered in the choice of economic policy. England could take industrial economic activities for granted – included the increasing returns, technological change, and synergies they produced – and until the United States itself had secured such industrial activities, it would be in its interest to nourish and protect them.
Particularly after 1820, with the publication of very important but now forgotten works by US economists Daniel Raymond and Mathew Carey in Hamilton’s tradition, both theories (Hamilton and Smith) were taught in the United States, and it is interesting to observe how, in this case, the democratic process provided a good policy choice for the US.

The split between the two schools of thought – for and against industrial protection – was a highly interesting one. As a general rule the Ivy League universities were in for free trade, while the Land Grant universities were for temporary protection. Cornell University – the only land grant university which was also Ivy League – actually had its economics department split into two.

The US debate for or against free trade is very well illustrated in the 1918 cartoon below, where the cartoonist has written ‘the same old statesmanship, or hundred years of up and down’. The men with top hats (industrialists) want tariffs to go up, and the men with the bowler hats (the financial sector) want the tariffs to go down. The end result was, I would argue, near perfect in terms of economic policy.

The industrialization of the United States was carried out consciously sacrificing the interests of US consumers (because tariffs made imported goods more expensive) in the interest of the same human beings, the consumers, but in their different role of producers who saw their wages
increasing very rapidly. The idea was that by changing the US economic structure from being purely agricultural to being a mix of manufacturing industry and agriculture, the country would be much richer. Important politicians who preached this point successfully were Henry Clay and Abraham Lincoln.

US industry grew strong under protection, but the industrialists were always facing the threat of free trade and thus kept on their toes. An important underlying argument through all of US industrial policy was that of technology.  Protection was instituted in order to make it profitable to establish new technologies in the US, but the same type of technology argument was later – towards the end of the 19th century – used in order to argue for free trade: US manufacturers were now so skilled and operated at such a large scale that they needed access to foreign markets in order to grow. In the democratic process the technology arguments won, both when favoring protectionism (Hamilton) and free trade (Smith).

Economics as a Nonperforming Academic Monoculture: The Post-Cold War West.

The Cold War gave us the kind of fashion-based economic development that Friedrich von Hayek feared. And at one level Hayek himself contributed. His 1944 book *The Road to Serfdom* represented a timely warning against the horrors of totalitarian communism. 1948, the year The Berlin Blockade started, gave us Paul Samuelson’s ‘proof’ that under the standard assumptions of neo-classical economics free trade would tend to equalize the prices of the factor of production, e.g. wages, across the world. These two theoretical contributions became important building blocks for Cold War Economics.

Another 1944 book, Karl Polanyi’s *The Great Transformation*, gave us a very different angle to capitalism, rooted in anthropological understanding of pre-capitalist societies. Polanyi’s first title planned for the volume, ‘Liberal Utopia’, was discarded because of the nearly opposite connotations in English on each side of the Atlantic, meaning ‘leftist’ in the US and ‘rightist’ in England.

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Equilibrium gave a sense of normality to the Post-War II economic order; there were more cars, more refrigerators, and more welfare in the West, while the rest generally stayed poor. But equilibrium was a treacherous metaphor. Sheltered from non-equilibrium mechanisms – like cumulative causations – the ignorance of the economics profession as to the blind spots of their theories grew behind increasing barriers to entry created by mathematical sophistication. With new technologies and new power relationships, a new financial crisis broke out in various steps starting in 1999 and 2000. The West was theoretically utterly unprepared for the present combined challenge of financial crises, environmental challenges, and the growth of China. These were all processes where the equilibrium paradigm – that had come to form the core of economic analysis – was at best unsatisfactory as a guide.

As Thomas Kuhn puts it: ‘A paradigm can, for that matter, even insulate the community from those socially important problems that are not reducible to the puzzle form, because they cannot be stated in terms of the conceptual and instrumental tools that the paradigm supplies’. This is precisely what happened to the neo-classical paradigm in economics.

In July 1998 *The New Yorker* carried an insightful article – on Harvard economist Larry Summers – entitled ‘The Triumphalist’. Indeed, triumphalism can serve as a label for the period starting with the 1989 fall of the Berlin Wall. The Cold War – an ideological fight between ‘the planned economy’ and ‘the free market’ – had dominated the world during the forty-one years between two Berlin events: the start of the Berlin Blockade in 1948 and the fall of the Berlin Wall in 1989. The planned economy had failed, and the free market triumphed.

During the Cold War Western economic theory had built up an increasingly idealized picture of the market economy. The economics profession was pushed towards a hard paradigm: mathematics became the language, and equilibrium became the dominating metaphor. At the same time, as part of the same process, experience-based economics – that had been centered in Continental Europe – slowly died out. This happened also because the vanquished Germans allowed their own history-based economic tradition to be thrown out with the bathing water. Indeed, as Financial Times economist Martin Wolf characterized Werner Sombart, the main German economist of the first half of the 20th century: he was both a fascist and a communist.

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40 Quoted in Reinert 2007, p. 123.
communism, only the purity of mathematics would be able to produce a science of a pure market economy. The important fact that the economics tradition of the United States – from the founding fathers to the institutional school of economics which dominated until after World War II – had been based on the same experience-based premises as the discredited German School was disregarded. Experience-based – as opposed to mathematics-based – economics had not only produced fascism and communism, it had also produced the US as the world power.

Social sciences generally operate on several levels of abstraction. A key problem of mathematized neo-classical economics that came into fashion during the Cold War was that it only came with one very high level of abstraction: the tools used automatically disregarded any and all real-life nuances and differences. By disregarding all differences between economic activities, between human beings, and between cultures, economics became a science depicting markets as producing automatic harmony. Economists proved, not very surprisingly, that a standardized humanity in a world where all economic activities were identical, would produce equality. When communism promised ‘from each according to ability and to each according needs’, this became an unnecessary complication of things: the market would also produce equality. That the apparent equality of outcome that the models produced was simply a result of the assumptions on which the theory was based – how could a model where everything is identical and equal produce anything but equality as an outcome? – was simply not listened to. The West sorely needed models supporting the perfection of the market system, and we got it.

But conversion to this belief – to neoclassical and later neoliberal economics as an Ersatz religion on which politics came to be based – was not instant. When, at the height of the Berlin Blockade, Paul Samuelson proved that under the standard assumptions of neo-classical economics, global free trade would tend to equalize the incomes of all people in all nations – the so-called factor-prize equalization theorem – this was treated more as a mathematical curiosity. Experience-based economics – as that of Gunnar Myrdal – was still of the opposite opinion: that free trade could work in the opposite direction, enlarging already existing differences between nations. However, with near extinction of non-mathematized (i.e. experience-based) economics in Western universities, what was once a mathematical curiosity became the firm belief on which triumphalist globalization was founded.

As the Cold War advanced, what were once merely assumptions needed in order to fit mathematical tools to economic realities gradually became accepted ‘truths’. Economists adopted economic individualism, i.e. they abstracted from studying societies. When Margaret Thatcher famously
said ‘there is no such thing as society’ she was merely stating a fundamental assumption of ruling economic theory. Assuming no difference between economic activities and a frictionless economy, economists modeled a world where a coordinating nation-state was no longer needed. So Ronald Reagan’s statement that ‘government is not the solution to our problem; government is the problem’ was completely in line with ruling economic theory at the time. The society modeled in neo-classical economics did not need governments, only centuries of experience would contrast what had become the mathematically obvious fact expressed by Reagan. Economic theory modeled a world with no voluntary unemployment, and it therefore became legitimate to label all the unemployed of the world as ‘lazy’. Neo-classical economic modeling produced that blend of wishful thinking, ignorance, and intolerance which we call neoliberalism.

In order to understand the workings of the world economy, I find it crucially important to distinguish neoliberalism as an economic theory from other types of politics that are traditionally associated with the political right: from conservatism and fascism. Two main features separate neoliberalism from other economic policies left and right: 1) the insistence, also in practical policy, that all economic activities are qualitatively alike, so that free trade – under any and all circumstances – is always the best solution, and 2) this type of theory does not separate the financial economy from the real economy. Not only is the financial economy seen as a mirror image of the real economy, a disproportionate and exponential growth in the financial sector, as the West now experiences, tends to be seen as being no different from a similar growth, say, in the steel industry, car industry, or the ICT sector.

That by abstracting from key agents and key phenomena economics had also abdicated from studying reality only became evident much later. Under a guise that the magic of the market would create factor-prize equalization, the opposite movement – towards a polarization of incomes – is taking place. In the meantime vested interests took over increasingly larger slices of the economy. Under the assumption that the financial sector can be treated as any other sector in the economy, and under the assumption that no regulation of the financial sector was necessary (the abandonment of the Glass-Steagall Act), individuals and nations are increasingly becoming debt slaves to the financial sector. Under the assumption of perfect competition, what used to be called natural monopolies – the opposite of perfect competition – have been privatized, and long-lasting monopolies and quasi-monopolies have been created. All in all, the economics profession became a useful tool (and fool) for the vested

41 First Inaugural Address, January 20, 1981.
interests of a ‘plutocracy’. Under the assumption that markets would create automatic harmony, the West – particularly the United States – is embarking on a process of Darwinian survival of the fittest, a movement that previously been stopped starting in the 1890s and again in the 1930s. The distribution of wealth and income is moving in the direction of a post-industrial feudalism, but a new type of feudalism, where power is not narrowly based on land ownership but on financial ownership in general.

It is worth mentioning that twice in its history the United States has faced a similar development, once in the 1890s and once in the 1930s. Towards the end of the 19th century, English philosopher Herbert Spencer, who was very influential in the United States, preached a Darwinian survival of the fittest philosophy that had enormous appeal to recent wealth in the United States. The influence of Spencerian philosophy among the wealthy classes can be compared with the influence of neoliberalism today. However, a combination of alternative economic theory and investigative journalism reversed this tendency, and economic democracy was restored.

Anti-trust was a key element that prevented the rise of ‘industrial feudalism’ in the United States. The Sherman Act of 1890 attempted to stop the monopolization of economic power by outlawing cartelization (every ‘contract, combination . . . or conspiracy’ that was ‘in restraint of trade’) and monopolization (including attempts to monopolize). However, the law failed to define these terms well. The second antitrust law, the Clayton Act, passed in 1914, filled in these gaps.

The founders of the American Economic Association – founded in 1885 – all had an educational background in Germany, and were on the side of the reformers. In his 1899 Theory of the Leisure Class, Thorstein Veblen ridiculed and fought against the emergence of a feudal-type industry-based upper class: just the type of class society that the majority of migrants had left Europe in order to escape. The most influential US economist at the time was Richard Ely, described as a ‘Christian Socialist’.

Investigative journalism and literature at the time pulled in the same direction as did the majority of the economics profession: against the enormously powerful market forces producing a concentration of wealth. Ida Tarbell’s 1904 book The History of the Standard Oil Company – listed as No. 5 in a 1999 list of the top 100 works of 20th-century American journalism – started a new trend of investigative journalism that came to be called muckraking. President Theodore Roosevelt was not pleased with the radical views of novelist Upton Sinclair, but worried enough about him to acquire and read an advance copy of Sinclair’s 1906 novel The
Jungle. No doubt this literature – in tandem with institutional and evolutionary theory – was important in preventing the US from becoming ‘feudalized’ around the last turn of the century, and again in the 1930s with books like John Steinbeck’s *Grapes of Wrath*. The question is if today’s fight against post-industrial financial ‘feudalism’ will be as successful as the previous ones.

**Conclusion.**

In addition to missing the mechanisms behind financial crises, today’s economic theory also misses the diversity of Man’s production, and the relationship between this diversity and the diversity of growth and welfare between nations. Neo-classical trade theory – originally a tool that prevented colonies from industrializing – fails to recognise qualitative differences between economic activities, not recognising that growing wealth always has been a product of innovations, increasing returns, and synergies which are products of an extensive division of labor. This standard theory has long hurt the colonies of the West, but it is now hurting the West itself in its own competition with Asia. The theory has boomeranged, and it is time for the West to shift theory.

On previous occasions – during the French Revolution, in 1848 and in the 1930s – the flow of economic thought has changed course. On these occasions the world has woken up to the harmful irrelevance of ruling theory of a type that is incommunicable to the interested layperson. I have referred to these moments as ‘1848 moments’. John Stuart Mill comments on this type of situation:

‘It often happens that the universal beliefs of one age of mankind – a belief from which no one was, nor without an extraordinary effort of genius and courage could at the time be free – becomes to a subsequent age so palpable an absurdity, that the only difficulty then is to imagine how such a thing can ever have appeared credible...It looks like one of the crude fancies of childhood, instantly corrected by a word from any grown person.’

The world is again in a situation as Mill describes, where the need to reconstruct an alternative theory is urgent. Mill sees the need for courage and genius, but other qualities could also prove to be important. In the fairy-tale of the Emperor’s New Clothes the naïveté of a young boy substituted for courage, and the systematic observations of complexities in the real

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The world coupled with ordinary common sense may well substitute for theoretical genius in the traditional sense. What needs to be reconstructed is a *science of practice*: a theory based on human observations of facts. This contrasts with today’s standard economics, where observations of reality tend to be filtered through a set of arbitrary and – from the point of view of observable reality – mostly totally inappropriate assumptions. This theory produces accuracy, but at the expense of relevance.

Margaret Thatcher famously said ‘there is no alternative’, and in this tradition capitalism is often presented as one solid block of theory to which there is no alternative. Hyman Minsky, on the other hand, argued that there are fifty-seven varieties of capitalism. To explore and reconstruct the many alternative versions of capitalism, we need to resurrect the methodology of the historical schools: creating new knowledge by connecting previously unconnected facts. Present mainstream theory cannot for ever explain away important phenomena as ‘market failure’ rather than recognize them for what they really are: theory failure.

1848 moments serve to reconnect economics with the public sphere. Esoteric theoretical constructions – where common sense is rare – are demolished in order to make room for more pragmatic theories that become tools for democratic policy-making; abstract patent medicines are substituted by concrete analysis and policy measures in different contexts; and the language of communications changes, in this case, from *Latin* (mathematics) also to using the *Vernacular* (English and other languages).

It is possible to end the great disconnect, but we are facing formidable obstacles in the vested interests that collect huge rents from the present state of economic theory.

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43 As with Heinz ketchup there are 57 varieties.
Working Papers in Technology Governance and Economic Dynamics

The Other Canon Foundation, Norway, and the Technology Governance program at Tallinn University of Technology (TUT), Estonia, have launched a new working papers series, entitled “Working Papers in Technology Governance and Economic Dynamics”. In the context denoted by the title series, it will publish original research papers, both practical and theoretical, both narrative and analytical, in the area denoted by such concepts as uneven economic growth, techno-economic paradigms, the history and theory of economic policy, innovation strategies, and the public management of innovation, but also generally in the wider fields of industrial policy, development, technology, institutions, finance, public policy, and economic and financial history and theory.

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