

**ETHICS, EQUITY,  
AND SOCIALLY RESPONSIBLE BEHAVIOR**

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**This is a complex issue. Maybe too complex for me. But TSE is the place to test a few ideas of mine.**

**I wanted in this Keynote Address to present an encompassing view of Ethics, Equity and SRB (CSR-ESG) and their foundations, from an economic point of view.**

**An impressionist' view.**

**TSE, my second home for 46 years.**

**JJL: « Marcel est le plus Québécois des Toulousains »**

**HOW TO DESIGN INSTITUTIONS CAPABLE OF GENERATING ETHICS, EQUITY, AND SOCIALLY RESPONSIBLE BEHAVIOR?**

**BUT INSTITUTIONS EVOLVE OVER TIME.  
SO, HOW TO DESIGN AND INTEGRATE THE UNDERLYING FACTORS THAT WILL DETERMINE OR GUIDE THE DEVELOPMENT OR SURVIVAL OF THOSE INSTITUTIONS?**



## **Plan**

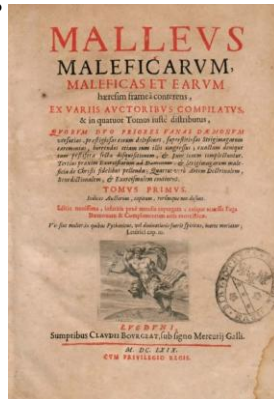
- 1. Adopting and Regulating new technologies' "unintended consequences"**
  - ❖ Printing press
  - ❖ Radio
  - ❖ AI
- 2. The Economics of Ethics, Equity, CSR-ESG-SRB, Collective Intelligence\***
- 3. CSR-ESG-SRB is First and Foremost a Governmental Issue: It is because of a government failure that CSR-ESG-SRB has become a business issue**
- 4. The Level and Breadth of CSR-ESG-SRB through Collective Intelligence\***



**THE PRINTING PRESS ≈1440 \***

***Malleus Maleficarum (Hammer of Witches)*, 1486, more than 35 reeditions; widely distributed (second only to the Bible): The existence of witches, their discovery, their sentencing to death (torture); up to 100K were killed, of which 75% were women. The printing press: a catalyst for witch-hunting.**

**How to prevent the “unintended consequences” of new technologies, as part of CSR-ESG-SRB?**

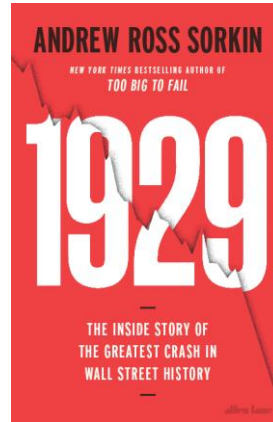
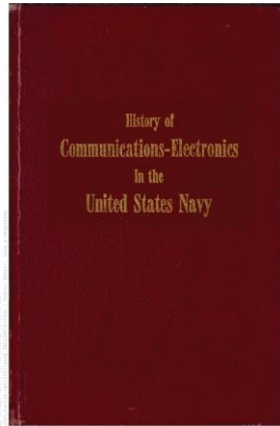


**The book was enormously popular, with 36 editions printed between 1486 and 1669. [Barbara Bieck, New York City Library, 2020.**

**<https://www.nysoclib.org/blog/malleus-maleficarum-hammer-witches>]**

**RADIO, as the “Internet and AI” of the 1920s, raised significant fear/anxiety: Political demagoguery and control; false information (medical); destruction of interpersonal communications; information overload, +++.**

**How to ...? In the early 1920s, there were serious attempts to slow down the development of radio, and to put radio under a Government monopoly. \***



  
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**RCA: 5\$ (2021), 575\$ (1929), 13\$ (1932). A 98% drop (1929-1932).**

**AI and the threat to humanity: The power of AI becomes a menace when (i) the “machines” are capable of hubris in autonomous operation (Bengio 2026; 2001: *A Space Odyssey* 1968) and when (ii) the objectives and incentives of humans and “machines” are misaligned (intentions, survival, moral hazard, adverse selection, information manipulation). How to ...? Competition, Regulation, Governance, human-robot Laffont-Martimort incentive contracts?**



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**Yoshua Bengio, in an interview with Le Monde 23 January 2026, mentions the problem of “alignment” between the behavior of AI and our intentions.**

**There is an ethical conflict.**

**Yoshua Bengio favors a joint regulatory vision for AI development over a competitive process among AI firms.**

## Regarding “unintended consequences”

Donald Rumsfeld, US Secretary of Defence (2001-2006):

*“There are known knowns. There are things we know we know. We also know there are known unknowns. That is to say, we know there are some things we do not know. But there are also unknown unknowns, the ones we don’t know we don’t know ... And if one looks throughout the history ... , it is the latter category that tends to be the difficult ones.”*

DoD News Briefing – Secretary Rumsfeld and Gen. Myers, news release, US Department of Defense, 12 February 2002, <https://archive.ph/20180320091111/http://archive.defense.gov/Transcripts/Transcript.aspx?TranscriptID=2636>

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**In contracts (e.g. PPP; stakeholders vs shareholders; different ownership), unknown unknowns give rise to residual decision rights, a major contribution of “efficient governance analysis” to Collective Intelligence**

## 2. The Economics of E&E and Collective Intelligence -1 \*

❖ *Collective Intelligence refers to the interconnection of human brains in achieving higher levels of productivity and social well-being (Kantian Ethics).*

*The interconnection of those brains goes through institutions (laws and social rules), specialization, innovative technologies, markets (prices), and trade.*

*The ability to trade, especially with strangers and over time, is a distinguishing characteristic of humans.*

- Paul Seabright, *The Company of Strangers: A Natural History of Economic Life* (Princeton, NJ: Princeton University Press, 2010): (edited) “This morning I bought a simple shirt – without informing anybody in advance – that represents a triumph of international cooperation. It was made up in Malaysia, but the materials and machinery came from at least 11 countries, including India, the US, Portugal, Brazil, and Germany. Engineers in Cologne and chemists in Birmingham began the preparation many years ago, well before an Indian farmer led plowing bullocks across his land. All these people have been working without knowing or caring about the 20 million people of widely different sizes, tastes, and incomes who decided to buy shirts at the same time as I did. Tomorrow there will be another 20 million – perhaps more.”
- Matt Ridley, *The Rational Optimist: How Prosperity Evolves* (New York: Harper Perennial, 2011)
- Yuval Noah Harari (2014), *Sapiens: A Brief History of Humankind* (New York: Harper, 2014)



**We are inter-dependent and inter-connected, more so than ever before, in ways that defy understanding.**

## 2. E&E and Collective Intelligence: Kantian Ethics and Ethical Efficiency -2

- ❖ Jean-Jacques Laffont wrote (1975): “*To give substance to the concept of a new ethics, we postulate that a typical agent assumes (according to Kant's moral) that the other agents will act as he does and he maximizes his utility function under this new constraint... To induce people to behave in a "Kantian" way may be a very good solution to some problems, and the relevance of such a policy is connected to the existence of macro-economic constraints... We can expect to realize the positive aspects of Kantian behaviour even when the social interest is, to some reasonable degree, in conflict with private interest. The argument indicates why it should be possible with some hope of success to ask people to make non-financial sacrifices such as efforts to put rubbish in bins and to save energy.*”
- ❖ Environmentalist Joan Roughgarden wrote (2001): “*Economists are not about to cede the moral high ground to ecologists just because humanity is contained in a giant ecosystem. In principle, economics deals with ‘ethical efficiency’ – trying to achieve the most good for the most people given a ‘budget constraint’ of either time or money. Of course, matters may not work out so ideally, but it’s important to realize that the ethical starting points for both ecologists and economists are equally noble.*”



**Jean-Jacques LAFFONT (1975). “Macroeconomic Constraints, Economic Efficiency and Ethics: an Introduction to Kantian Economics”, *Economica* 42 (168), pp. 430-437.**

**Other references on Kantian Ethics (Angela Inger and Jurgen Weibull (2013), “Homo Moralis – Preference Evolution under Incomplete Information and Assortative Matching”, *Econometrica*.)**

**<https://plato.stanford.edu/entries/kant-moral/>**

**Joan Roughgarden (2001), “Guide to Diplomatic Relations with Economists,” *Bulletin of the Ecological Society of America* 82, no. 1: 85–6.**

## 2. The Economics of E&E and Collective Intelligence -3

- ❖ *Economics is the study of mechanisms (competition, coordination, motivation, specialization, regulation, incentives, rules of exchange) that condition the development of collective intelligence in human society.*
- ❖ *The fundamental roles of static and dynamic competition and competitive prices.*
- ❖ *Ethics, Equity, and Socially Responsible Behavior are fostered by Collective Intelligence, itself fostered by ACM2, Augmented Competition and Market (price) Mechanisms.*
  - ❖ *Positive Scientific Program: Study of the Evolution of Institutions*
  - ❖ *Normative Public Policy Program: How to Influence the Evolution, through Institutional Innovations*



**A chain/network of profit/value maximizing firms and utility maximizing individuals, facing and interconnected through competitive prices, is an ethical and equitable chain/network**

**(remember Milton Friedman 1970, reinterpreted)**

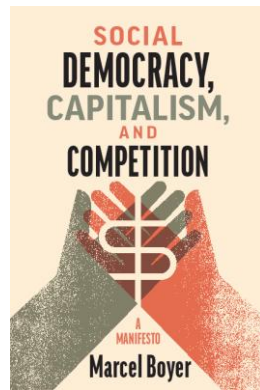
**Collective Intelligence and CSD (Competition-based Social Democracy)  
and NCC (New Competition-based Capitalism)**

*Separating Objectives (politics) and Means (economics)*

*Defining the Specific Roles of Government, Business, and the Individual*

*CSD and NCC: Generic Policies and Programs*

*“Competing for the Common Good”, TSE Reflect, April 2022*



**My preliminary version in *TSE Reflect* April 15, 2022  
“Competing for the Common Good”**

*The following Augmented Competition and Market Mechanisms (ACM2) are aimed at developing Collective Intelligence, hence Ethics & Equity (1/3):*

- ❖ Countering price manipulations and encouraging firms to refrain from doing business with heavily subsidized suppliers or clients. Not pricing externalities is a price manipulation.
- ❖ Developing (i) markets, carbon levies, property rights (patents) to induce individuals and firms to take into account environmental impacts and intergenerational issues (save people now or save people later).
- ❖ Developing competitive access to public and private infrastructures (platforms, networks).\*
- ❖ Developing extended liability rules to raise the incentives for firms and their partners to prevent industrial and environmental accidents (efficient regulatory governance).\*



**The artificial manipulation of prices in energy and agriculture necessarily and inevitably lead to mismanagement, wrong investments, and collective impoverishment.**

**Canada: 300% tariff for milk, eggs, and poultry under supply management.**

**Similar analyses could be applied to education and healthcare.**

**It is not low or high prices that generate growth and welfare, but the right prices.**

*The following Augmented Competition and Market Mechanisms (ACM2) are aimed at developing Collective Intelligence, hence Ethics & Equity (2/3):*

- ❖ Moving toward abolishing taxes on corporate profits to encourage companies to focus on their core missions of wealth creation, R&D investment, and productivity gains.  
Big Tech data: taxes generated versus taxes paid.



**In 2025, the Government of Canada had total fiscal revenues of C\$ 511B, comprising Personal Income Tax (PIT) C\$234B (46%), Corporate Income Tax (CIT) C\$97B (19%), Goods and Services Tax (GST) C\$52.5B (10.3%), and other sources.**

**One way to replace the CIT would be to double the less-distortionary GST from 5% to 10%. Replacing both the PIT and CIT would require raising the GST from 5% to 36.5%, the economists' preferred system, with  $TmS=TmT$ .**

**TABLE 3.1: TAXES GENERATED BY BIG TECH**  
Reported to the SEC (2022)      Estimated taxes paid by employees

Company	Median salary	Number of employees	Estimated total payroll	Estimated taxes paid by employees		
				Income taxes	Other taxes @20% on 90% of income net of D taxes	Total taxes
	A	B	C=A*B	D=%*C	E	F=D+E
Alphabet (Google)	\$295,884	156,500	\$46,3B	@30%, \$13.9B	\$5,8B	\$19,7B
Amazon	\$32,855	1,608,000	\$52,8B	@10%, \$5.3B	\$8,6B	\$13,8B
Meta (Facebook)	\$292,785	71,970	\$21,1B	@30%, \$6.3B	\$2,7B	\$9,0B
Apple	\$68,254	164,000	\$11,2B	@20%, \$2.2B	\$1,6B	\$3,9B
Microsoft	\$190,302	221,000	\$42,1B	@30%, \$12.6B	\$5,3B	\$17,9B
Netflix	\$201,743	11,300	\$2,3B	@30%, \$683.9M	\$287,2M	\$971,2M
<b>GRAND TOTAL</b>						<b>\$65,3B</b>

*The following Augmented Competition and Market Mechanisms (ACM2) are aimed at developing Collective Intelligence, hence Ethics & Equity (3/3):*

- ❖ Favoring efficient creative destruction through mechanisms and institutions
  - (i) to help individuals as well as firms and organizations better adapt to changes caused by creative destruction (modularity and flexibility),  
BLS-BED data showing a ratio of 10-12 to 1)
  - (ii) to prevent anti-competitive behavior (entry prevention, abuse of dominance, deceptive advertising and marketing).



**TABLE 2.1: Gross Job Gains and Losses (BLS-BED)**  
(Italics refer to periods of quarters with negative net change)

A(B) Period (nb of quarters)	C Average gross job gains per quarter ('000)	D Average gross job losses per quarter ('000)	E: C-D Average net job change per quarter ('000)	F: C/E Average gross job gains and losses/average net jobs change	G: D/E
1992.3–2000.4 (34)	8095	7440	655	12.4	11.4
2001.1–2003.2 (10)	7808	8192	-384	-20.3	-21.3
2003.3–2007.4 (18)	7719	7310	409	18.9	17.9
2008.1–2010.1 (9)	6668	7696	-1028	-6.5	-7.5
2010.2–2019.4 (39)	7297	6755	542	13.5	12.5
2020.1–2020.2 (2)	6377	14089	-7712	-0.8	-1.8
2020.3–2022.1 (7)	9013	6912	2101	4.3	3.3
<b>All quarters with positive net change (98)</b>	<b>7774</b>	<b>7106</b>	<b>668</b>	<b>11.6</b>	<b>10.6</b>
<b>All quarters with negative net change (21)</b>	<b>7183</b>	<b>8541</b>	<b>-1358G</b>	<b>-5.3</b>	<b>-6.3</b>
<b>All quarters 1992.3–2022.1 (119)</b>	<b>7670</b>	<b>7359</b>			

*Augmented Competition and Market Mechanisms (ACM2)*

- ❖ *Some major historical errors in misjudging ACM2*
  - ❖ William Stanley Jevons, *The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal Mines* (London: Macmillan, 1865)
  - ❖ Meadows at alii, *The Limits to Growth, The Club of Rome* (Washington, DC, 1972).
- ❖ *Creating Value, How and When: Value of Work* (TSE Mag, Fall 2023)
- ❖ *Collective Intelligence enhancement through Efficient Governance, Pricing of Externalities, Innovation, Risk Management (financial options\*), Rule of Law – Liabilities\**



\* M. Boyer, “What are we working for?”, *TSE Mag*, Fall 2023

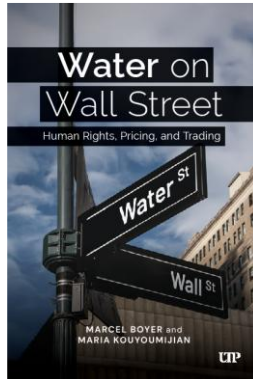
\* **Financial options**: Until the early 1970s, no one had been able to establish the value of this type of good, and the options market was virtually nonexistent. The sometimes significant effort involved in establishing the value of complex goods such as options and other derivatives, as well as copyrights, must not be underestimated. In 1973, three economists developed a convincing approach to the value/price of an option; the market for options could and did emerge in the 1980s. F. Black and M. Scholes (1973), “The Pricing of Options and Corporate Liabilities,” *Journal of Political Economy* 81(3), 637-654. R. Merton (1973), “Theory of Rational Option Pricing”, *The Bell Journal of Economics and Management Science* 4(1), 141-183.

\* For the valuation of copyrights, see Boyer, M., “The Three-Legged Stool of Music Value: Hertzian Radio, SiriusXM, Spotify”, pp. 13–40 in Ysolde Gendreau (ed.), *Copyright in Action: International Perspectives on Remedies, Proceedings of the 2018 World Congress of ALAI (Alliance littéraire et artistique internationale)*, Éditions Thémis, Montréal, 2019, 490 pages. for the more complete WP version, see <http://cirano.qc.ca/files/publications/2018s-32.pdf>

\* Recent decisions on addiction strategies by Google, Meta

### 3. CSR-ESG-SRB is First and Foremost a Governmental Issue

- ❖ *Failure 1: The Social Cost of Public Funds\**
- ❖ *Failure 2: Human Rights and Child Labour/Education (Opportunity Cost/Value)\**
- ❖ *Failure 3: Environmental Ownership and Liability (Use and Value)*
- ❖ *Failure 4: Grants and Guarantees to Private Business: Cronyism and Auctions*
- ❖ *Water: Human Rights, Pricing, and Trading*
  - ❖ *Boyer-Kouyoumijian, Univ of Toronto Press, Sept 2026*



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**The social cost of public funds: borrowing rate vs financial option from citizens/taxpayers**

**US National Child Labor Committee. Collection of photos**

**<https://www.loc.gov/pictures/collection/nclc/>**

**TSE Reflect April 2022**

#### 4. The Level and Breadth of CSR-ESG-SRB through ACM2

- ❖ *Access to digital platforms, networks, SEP  
FRAND, Real Options, Laffont-Tirole GPC*
- ❖ *Managing Risks: Boyer-Laffont Extended Liability*
- ❖ *The Challenge of (Decentralized) Market Instruments  
The Juncker Curse and the Economists' Message: Gollier*
- ❖ *The Development of E&E through ACM2 is a random walk around an upward trend:*
  - *Geometric Brownian motion, Trend/Mean-reversion motion, +++*
  - *Concentrate on the medium and long term*

**Re: Stochastic Processes. There is no point in worrying about going down for a while if ACM2 is at work.**

ACM2 – Access to digital platforms/networks, SEP

*Laffont-Tirole GPC*

*FRAND, Real Options*

- ❖ To regulate firms that operates both in upstream (monopoly) and downstream (competitive) markets: GPC or joint regulation, implementing Ramsey-Boiteux pricing (minimal distortions)
- ❖ Remove the arbitrary distinction between wholesale access and retail pricing
- ❖ Leave the firm with a beneficial operational flexibility in setting competitive prices (under the cap)
- ❖ Allow for lighter, more efficient access pricing regulation
- ❖ Allow for more efficient entry, providing both incumbents and entrants with correct price signals without micromanaging prices
- ❖ Leverage the firm's superior information about its own cost structure
  
- ❖ Issues to consider and develop:
  - ❖ How to design the legal framework (numerous court cases \*) for FRAND access to SEP and networks under the Laffont-Tirole joint regulation?
  - ❖ How to implement the proper valuation of real options used/exercised in developing the SEP or the network infrastructure?
  - ❖ Joint/common costs allocation



**Laffont, J.J. & J. Tirole 1994. "Access Pricing and Competition" ,  
European Economic Review, 38: 1673-1710.**

**Laffont, J.J. & J. Tirole 1996. "Creating Competition through Interconnection :  
Theory and Practice" , Journal of Regulatory Economics, 10:227-256.**

**Laffont, J.J. & J. Tirole 2000. "Global Price Caps and the Regulation of Access",  
Brazilian Review of Econometrics, pp.115-146**

**Boyer, M. & J. Robert 1998. "Competition and Access in Electricity Markets :  
ECPR, Global Price Cap and Auctions", pp. 47–74 in G. Zaccour (ed.),  
*Deregulation of Electric Utilities*, Kluwer Academic Pub.**

ACM2 – Managing Risks: *Boyer-Laffont Extended Liability* \*

- ❖ The Boyer-Laffont Extended Liability framework (inspired by the US CERCLA and the 1991 Fleet Factors case) aims at holding financial plus other partners of the company responsible for an environmental/industrial disaster jointly and severally liable when the firm, under limited liability rules, cannot pay for those damages. The objective being to protect active and retired workers, compensate victims, ensure the rapid cleanup of contaminated sites, and provide strong incentives for companies and their partners (as credible private regulators) to better manage these risks.
- ❖ Under full information (safety care measures are observed by the bank), extended liability is a first-best policy.
- ❖ Under incomplete information (adverse selection, moral hazard), full extended liability may lead to bankruptcy, kill valuable projects, and reduce incentive for care. Partial liability becomes a second-best policy.
- ❖ Issues to consider and develop:
  - ❖ How to characterize the seriousness of incomplete information in order to properly balance the need for safety incentives and the need to ensure the financial viability of the firm/project?
  - ❖ How to determine the shares of the jointly and severally liable parties in covering the common costs? (Boyer, Lasserre, Moreaux, 2006).



**Boyer, M., Laffont, J.J., “Expanding the Informativeness of the Price System with Law”, *Canadian Journal of Economics / Revue canadienne d’économique*, XXII(2), 1989, 217–227.**

**Boyer, M., Laffont, J.J., “Environmental Protection, Producer Insolvency and Lender Liability”, Chapter 1, pp. 1-29, in A. Xepapadeas (ed.), *Economic Policy for the Environment and Natural Resources*, Edward Elgar Pub. Ltd., 1996.**

**Boyer, M., Laffont, J.J., “Environmental Risks and Bank Liability”, *European Economic Review* 41, 1997, 1427–1459.**

ACM2 – The Challenge of (Decentralized) Market Instrument: Climate change – *Gollier*

Bill Moyers (Environmental Grantmakers Association, 2001): “*If you want to fight for the environment, don’t hug a tree; hug an economist. Hug the economist who tells you that fossil fuels are not only the third most heavily subsidized economic sector after road transportation and agriculture but that they also promote vast inefficiencies... Hug the economist who tells you that the price system ... is the most potent tool of all for creating social change.*”

Challenges:

- ❖ Boyer-Gollier, *Le Monde*, *CD Howe Intelligence Memo*, April 2025
- ❖ Dangers of inaction
  - ❖ Gollier: *Économie de l’(in)action climatique*, septembre 2025
  - ❖ J-Pal (Duflo): risk of losing 40 years of gains toward poverty eradication
- ❖ Pricing vs Regulatory and Intrusive/Crony interventions in climate policies and projects
  - ❖ Simplicity vs complexity
  - ❖ Confidence in economists’ message (REP 2014, Ipsos 2017, Planet Money 2025):  
Gilets jaunes, The Canadian case
  - ❖ Maura Ryan’s story (*The Economist*, June 19th 2025)



**Bill Moyer (Environmental Grantmakers Association, 2001) On this association’s website (<https://ega.org/>) we read, “The ultimate goal of EGA and its members is a world with healthy, equitable, and sustainable ecosystems, communities, and economies.”**

## Conclusion: Moving Forward on Ethics & Equity

- ❖ The Pro-E&E Development Process of Collective Intelligence in Human Society
- ❖ The Magic Trio: Cooperation, Trust, Competition
- ❖ ACM2 at work:
  - ❖ The Social Value of Income and Wealth Inequalities
  - ❖ Innovation: Copyrights and Patents (new products and technologies; access)
  - ❖ The Value v Capture of public and private networks/platforms
  - ❖ Energy Conservation vs Development: **Both** through proper (competitive) pricing
  - ❖ Education and Healthcare: The respective roles of the public and private sectors
  - ❖ Infrastructures (roads, water, communications, trade)
  - ❖ Free trade through *informed inclusion of LDE* into chains and networks
  - ❖ +++
- ❖ The Dismal Science: Infinite needs vs limited resources
- ❖ The Juncker Curse (*The Economist*, “The quest for prosperity”, Special report, March 2007):  
“*We all know what to do, we just don't know how to get re-elected after we've done it.*”
- ❖ Einstein (apocryphal?): “*Economics is simple, but not easy.*”



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## The Social Value of Income and Wealth Inequalities

- ❖ **Inequalities as a socially essential mechanism for investment (“save/invest  $\approx 20\%$  of GDP”)**
- ❖ **Inequalities as an incentive mechanism for pro-growth creative destruction and innovation**
- ❖ **Inequalities as an incentive mechanism for acquiring competencies and exerting efforts**