The ‘Money and Sustainability’ Lecture Series on ‚How to Finance Our Anthropocene’ of the World Academy of Art and Science ‚Tao of Finance Initiative‘

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2023 Lecture Programme:

- Financing Our Common Future – A Mechanism That Can Change the World
- Financing Our Anthropocene – How Wall Street, Main Street and Central Banks Can Empower Us to Manage Our Global Commons
- The Real Tragedy of the Commons – The Future Wealth of Nations
- The Tao of Finance – From Silo to Systems, from Western to Eastern Thinking
- ESG – A New View on Taxonomies, Guidelines and Accounting Standards – The Healthcare System as a Case Study
- On Hedging and Funding Planetary Risks – Examples and Best Practices
- The Next Big Thing – A New Monetary Tool to Deal with Imported Energy Price Inflation – The Monetary Inflation Brake (MIB)
- Tomorrow Is Now – How to Finance Our Common Health – The WHO as a Case Study
- Lifting the Curse – On How to Treat the Dutch Disease, or Restructuring Sovereign Wealth Funds – Aramco as a Case Study
- Monetary Policy Is Geopolitics – What Is the Difference between the Chinese Belt and Road Initiative and the US Petrodollar System?
- A General Law of Economic Transformation – Keynes 2.0, or How to Upgrade the Monetary System to Face the Challenges of the 21st Century
- References, readings, podcasts, videos, links and handouts

Financing Our Common Future – A Mechanism That Can Change the World

Abstract: The indispensable missing link in the debate on sustainability is the monetary system. To date, the Sustainability Development Goals (SDGs) have primarily been financed through private sector financing, conventional public sector funding (taxes and fees) and philanthropy. However, these are not enough in scale and speed to finance our future. The introduction of a new monetary aggregate in the form of a complementary electronic currency specifically designed to finance global common goods would provide the necessary resources to achieve the SDGs while stabilizing the existing monetary system. This could be achieved by giving central banks a modified monetary mandate to inject new liquidity into the system (top down), or through corporate or communal initiatives like crypto- or communal currencies (bottom up). By issuing this kind of blockchain-enabled electronic currency, earmarked for SDG-related projects, and using channels for monetary flow other than the conventional system, we could finance our future differently. Letting go of our current monetary monoculture would in the long run stabilise international financial markets, increase monetary regulatory efforts, reduce negative externalities, increase the social Pareto optimum and stabilise political systems.

Keywords: UN SDGs – Finance – Monetary policy – New forms of financial engineering

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Financing Our Anthropocene – How Wall Street, Main Street and Central Banks Can Empower Us to Manage Our Global Commons

Abstract: In this lecture we take the initial argument of 'Financing Our Common Future' a step further and look more closely at the impact of a new monetary aggregate that runs in parallel to, and complements, the existing one. Introducing a general monetary law of economic transformation can help us to better classify the impact of asymmetric shocks to our society. It appears there are always two costs associated with these shocks: the cost of the shock itself and the cost of managing it. We categorize the traditional way of financing our commons as an incomplete 'six-pack' and demonstrate the impact of additional, complementary digital liquidity designed to finance our commons. The argument is supported with multiple specific examples and best practices.

Keywords: Asymmetric shocks – New monetary aggregate – CBDCs – Cryptocurrencies – Sustainability

Content:

- Anthropocene: on boundaries, tipping points and interconnectedness
- A general monetary law of economic transformation
- The traditional way revised: the 'six-pack'
- A new monetary aggregate and monetary channels: CBDCs – cryptocurrencies
- The great leverager: towards a monetary ecosystem
- Best practices and examples
- A multi-stakeholder approach: the Tao of finance

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The Real Tragedy of the Commons – The Future Wealth of Nations

Abstract: Garrett Hardin's seminal 1968 paper describes the tragedy of the commons in terms of common goods being neglected or overused. His theory has been widely adopted. However, it refers only to a special case, when an inadequate supply of public goods has to compete with the yield maximisation of the private sector. The real tragedy of the commons is not that it is overused or neglected, nor any free-rider and spillover effects it gives rise to, but rather the underlying financial incentives and disincentives that prevent an adequate supply. Consequently, the misalignment between our current monetary system and the global commons has led to the latter's erosion and partial destruction. Introducing a new monetary and fiscal policy of *strategic triangulation* can provide an adequate tool to finance our commons. With their ongoing central bank digital currency (CBDC) initiatives, regulators and central banks can offer a direct monetary mechanism to overcome this tragedy of the commons. Several concrete examples are provided in this lecture, concerning topics such as healthcare, education, climate change and the restoration of natural reserves.

Keywords: Financing the commons – New forms of financial engineering – Fiscal and monetary policy – CBDCs – Strategic triangulation

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The Tao of Finance – From Silo to Systems, from Western to Eastern Thinking

Abstract: The overlooked missing link in the debate on sustainability is the monetary system. Money is not a natural law, but a convention or club rule that can be adapted. It represents one of the most powerful social mechanisms humankind ever invented, offering both opportunities for and threats to its own future. Financing our Anthropocene is different from anything in the past. Ideas about finance have primarily been dominated by Western thinking. Such thinking at its best is expressed in empirical findings in psychology, bioscience and systems theory, where analytical, linear, cause-and-effect correlation predominates. If we start taking a more Eastern perspective (Taoism), not only can we reconcile the best of Western thinking, we can also shift our mindset towards a more integral, holistic view, where complementarity becomes key. And this affects the way we look at finance and money, revealing new, out-of-the-box monetary tools that can be used to finance our Anthropocene. This is why we call it the Tao of finance.

Keywords: Western and Eastern Thinking – Frames – Bioscience – Systems theory – Eastern thinking – Taoism – Complementaries

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ESG – A New View on Taxonomies, Guidelines and Accounting Standards – The Healthcare System as a Case Study

Abstract: ESG (environmental, social and governance) has become the new standard in accounting and referencing. We explore the pros and cons of an ESG taxonomy, with the healthcare system, as the single largest market segment in OECD countries, serving as a case study. A systems view can help us to better classify and guide decision-making by investors, large corporates, SMEs and policymakers. To overcome the ESG dilemma, we introduce new forms of blended finance in which the public sector absorbs a portion of the risk through an additional monetary aggregate and provide a more coherent taxonomy where less is more, faster and better. We offer specific examples of how a more transformative taxonomy could be established.

Keywords: ESG – Taxonomies – Regulation – Systems theory

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On Hedging and Funding Planetary Risks – Examples and Best Practices

Abstract: Currently, our opportunities and risks are driven by finance. If no money is available, opportunities such as new jobs, technological innovation, healthcare for all, infrastructure programs and education will simply not be utilized. The same is true for risk assessment. If there is no money available, corporates will not invest in an unsafe environment and will reduce their commitment to searching for new drugs for cancer or infectious diseases, and governmental bodies will avoid setting the right policies for infrastructure programs. So while finance currently drives opportunities and risks, it should actually be the other way round: missed opportunities and unchecked risks should drive finance to explore the most ambitious, elaborate, innovative and advanced financial engineering possible to address both opportunities and risks at the same time. Cost analyses and risk assessments must be done differently in the Anthropocene era. Future developments are now determined by opportunity costs and planetary risks. We make a first comprehensive attempt at systematization that can serve as a template for blended finance and blended securitization in order to finance our global commons. We show that financing our future requires multiple new financial engineering techniques that build upon the experiences of the private sector, but need to be adapted to meet the criteria of force majeure and planetary risks.

Keywords: Risks – Uncertainties – Hedging instruments – Asymmetric shocks – New forms of financial engineering

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The Next Big Thing – A New Monetary Tool to Deal with Imported Energy Price Inflation – The Monetary Inflation Brake (MIB)

Abstract: In the Anthropocene, asymmetric external shocks (wars, climate change, species loss, pandemics) are becoming more prominent. They differ from the well-known internal shocks (banking crises, corruption, real-estate bubbles). Whereas in the event of internal shocks, conventional tools such as austerity, fiscal stimulus programs and additional philanthropy are the most common remedies, these tools are far less helpful in the case of asymmetric external shocks, which affect our consumer price index (CPI). In these cases, a risk-adapted, augmented monetary policy outperforms any redistributive fiscal policy and can help absorb part of the risks and uncertainties that lie ahead. This kind of monetary finance is cheaper, faster and more resilient, and requires less administrative regulation. The lecture explores the options opened up by this kind of expanded monetary policy in light of inflation in the price of imported energy.

Keywords: CPI – Imported energy and food price inflation – Monetary inflation brake

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Tomorrow Is Now – How to Finance Our Common Health – The WHO as a Case Study

Abstract: Traditionally, we are used to financing our healthcare system through private sector financing, conventional public sector funding and/or philanthropy. These sources are important, but insufficient in terms of scale and speed to meet today's pressing healthcare challenges across the globe. The WHO's primary mission is health for all, i.e. healthcare understood as a common good. With a budget of five to seven billion USD/year, the WHO is chronically underfunded. Just one billion USD of that budget comes from member state fees, the rest comes from voluntary and private philanthropic commitments, which are mainly earmarked already. Meeting the challenges ahead requires additional liquidity and funding upfront. The monetary and financial system is not neutral with regard to healthcare issues. Traditionally, finance drives healthcare. It should be the other way round: healthcare should drive finance. And it should also be noted that supporting and investing in a (secondary) preventive mechanism of this sort will be much cheaper than waiting for the next pandemic and then trying to repair the system after the fact. The lecture outlines major new forms of financial engineering and the new role of regulators in enabling healthcare as a common good.

Keywords: Universal healthcare – Global commons – WHO – Preloaded funding

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Lifting the Curse – On How to Treat the Dutch Disease, or Restructuring Sovereign Wealth Funds – Aramco as a Case Study

Abstract: Empirically, most countries rich in natural commodities perform poorly when it comes to human development indices. And they adopt surprisingly similar financial mechanisms in response. The results are appreciation of the domestic currency, poorly developed domestic markets, indirect de-industrialisation and economic recession. Even the shift from fossil energy to renewables does not change the playing field but rather relocates it to other countries. This dilemma can be demonstrated by considering SWFs in general and Aramco, the largest oil company in the world, as a specific case study. However, new out-of-the-box monetary and financial tools, in combination with a new role for regulators, can cure the well-known Dutch disease. In the golden age of Islam (750–1250 AD), while Europe and the rest of the world were still stuck in the darkness of the Middle Ages, the Middle East was the cradle of civilisation. Applying a new monetary regime to restructure SWFs and Aramco's agenda could help restore the region's legendary past and make it a model for the 21st century.

Keywords: Sovereign wealth funds – Dutch disease – New monetary tools – Aramco

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Monetary Policy Is Geopolitics – What Is the Difference between the Chinese Belt and Road Initiative and the US Petrodollar System?

Abstract: The Chinese Belt and Road Initiative and the US petrodollar system appear to be completely different at first glance. The Belt and Road Initiative favours an international trading corridor, whereas the petrodollar system ensures fossil energy for US citizens. From a monetary policy perspective, however, they have a lot in common: additional (extra-territorial) liquidity is provided to fund and manage the respective country's political and economic agenda. Though the historical evidence is incomplete, this appears to have been the case throughout the last thousand years. Parallel currencies, the MEFO swaps under Germany's National Socialist regime and the IMF's special drawing rights (SDR) serve as preliminary examples. If we take this argument one step further, we can demonstrate that the EU can do better with the euro. Strategic triangulation between regulators, free market participants and an active state can provide a more appropriate financial agenda to fund, manage and hedge the European Green Deal and the UN SDGs. This can enable circular and more regional economies and absorb part of the associated risks. A new monetary aggregate can provide the basis for more sustainability, peace and welfare for all of us. That is why monetary policy is geopolitics.

Keywords: Chinese Belt and Road Initiative – US petrodollar system – Historical evidence – New monetary politics – Role of the Euro – CBDCs

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A General Law of Economic Transformation – Keynes 2.0, or How to Upgrade the Monetary System to Face the Challenges of the 21st Century

Abstract: In his seminal 1936 work *The General Theory of Employment, Interest, and Money,* J. M. Keynes argues that markets are unstable and volatile, leaving people unemployed and ultimately leading to a Pareto inferior equilibrium. A state- driven intervention can overcome these constraints and balance out a deflationary situation in an anti-cyclical manner. Such interventions proved to be an effective tool for managing economic crises in the 20th century. However, the challenges of the 21st century are different, involving serial asymmetric external shocks (pandemics, wars, climate crisis, etc.) that affect our economies and require a more substantial transformation of our entire society. This lecture shows that any business-as-usual (BAU) and wait-and-see (WAS) strategies will be far too expensive. A business-under-transformation (BUT) scenario is introduced, which entails a general law of economic transformation. With an upgraded monetary system that takes precedence over national fiscal policy, the challenges of the 21st century can be addressed. This proposal allows us to update J. M. Keynes's seminal work and reconcile its major findings with other economic schools, in particular monetarism (Friedman), the Austrian economic school (Hayek) and modern monetary theory (MMT), giving us the preliminary components of a general theory 2.0 for the 21st century.

Keywords: J. M. Keynes – Financing our global commons – Monetary policy – Sustainable development – Reconciling liberalism and monetarism

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Over 400 references, readings, podcasts, videos and links are available through the author:

References and readings (selected)

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Podcasts and videos (selected)

- ‚On ESG -Taxonomy and Stress-tests for a common sustainable future…" Interview at the ‚Warsaw School of Economics', see: https://www.youtube.com/watch?v=Sq0NJZfgVp0

- 'Financing Our Anthropocene – 8 Stories behind the Argument', speech given at the international NEOS Conference in Dresden: https://www.youtube.com/watch?v=zl_fdeYnj5g

- 'Alternative Financial Engineering to Fund Our Health – The WHO Case', ResearchPod podcast: https://researchpod.org/arts-humanities/alternative-financial-engineering-to-fund-our-health-the-who-case

- 'Lifting the Resource Curse', ResearchPod podcast: https://researchpod.org/business/lifting-the-resource-curse

- 'Financing Our Anthropocene', ResearchPod podcast: https://researchpod.org/business/financing-our-anthropocene

- 'The Next Big Thing: A Monetary Inflation Brake', ResearchPod podcast: https://researchpod.org/business/the-next-big-thing-a-monetary-inflation-brake

- 'Financing the Anthropocene' (5 min. primer): https://www.youtube.com/watch?v=8Z2eH75Rw9g

- 'A Mechanism That Can Change the World' (TED talk, suitable for general audience, 15 mins): https://www.youtube.com/watch?v=daEbMngJ7Q8

- 'Blockchains – Financing the Future – Sustainability – SDGs' (UN talk, suitable for general audience, 30 mins): https://www.youtube.com/watch?v=7zc12ZPbMLE

- 'The Real Tragedy of the Commons' (7 mins): https://www.youtube.com/watch?v=CUy_pmEwEHk

- 'Hedging and Funding Planetary Risks' (11 mins): https://youtu.be/qr5980s6uVY

- 'How to Finance the SDGs' (parts 1+2) (interview, 13 mins): https://www.youtube.com/watch?v=D5G2HRO5Tk8

- 'The "Real" Tragedy of the Commons: Can a Dual Currency System Achieve a Pareto-Superior Equilibrium?' (aimed at academic audience, 15 mins): https://lt.org/publication/real-tragedy-commons-can-dual-currency-system-achieve-pareto-superior-equilibrium

Handouts

Including a complete reference list, further tables, videos, short books, illustrative folders, graphs including links and a policy brief, etc. Available for all lectures.

Forthcoming

- 'Keynes 2.0 – A General Theory of Financing Our Commons, Money and Sustainable Growth for the 21st Century' (in the making 2023/24)

- *Financing Our Future* (2021), licensed in Arabic (Arab Nile Group, in press 2023)

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- *Lancet* Covid-19 Commission Task Force on Green Recovery (2021-22)
- UN SDSN Senior Working group (2021-22)
- CMO & Medical Director (Saxonia)
- Friends of the Earth Germany (BUND)
- Liberal Democratic Party (FDP)
- ‚Sustainable Finance' Advisory Board of the German Federal Government (2022-)
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