



TSE MAG

MONEY AT SEA

SINK OR SAIL?



ISSUE 28 | FALL 2025

TOULOUSE SCHOOL OF ECONOMICS

Annual magazine of
Toulouse School of Economics

1, Esplanade de l'Université
31000 Toulouse, France

www.tse-fr.eu

✉ contact@tse-fr.eu

☎ +33 (0) 5 67 73 27 68

🐦 @tse-toulouse

📺 @tse_toulouse

📍 @toulousschooleconomics

📍 @tse_toulouse

KNOWLEDGE IS POWER

This magazine is part of TSE's strategic pivot towards shaping the leaders of tomorrow. In line with our researchers' focus on the Common Good, each issue aims to provide the public with scientific insights about the 21st-century challenges that concern us all.

Younger readers, we want to inform, inspire and empower you to take action and make a difference!

We want to hear from you! Got an idea for an article? Share it! Confused about a concept? Ask away! Just want to say hi? We're all for it!

✉ com@tse-fr.eu

Publication Director:

Christian Gollier

Editor in chief:

Tiffany Naylor

Managing editor:

Caroline Pain

Reporting & editorial

contributions:

James Nash

Design and illustrations:

studio-labotte.fr, Perceval Barrier

Photos:

Studio Tchiz, Banque de France,

Lydie Lecarpentier



5000 printed magazines

ISSN: 2554-3253

This magazine has been funded by a French government subsidy managed by the Agence Nationale de la Recherche under the framework of the Investissements d'Avenir program (ref: ANR-17-EURE-0010).

EXPLORE AND LEARN



Check out our bibliography for all the sources behind this magazine, and click on the portraits to get to know the researchers who contributed.

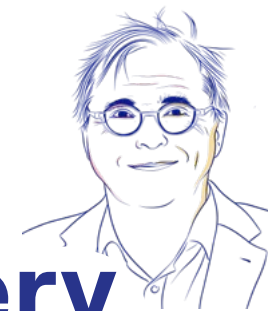


KNOWLEDGE ACROSS FRONTIERS

Founded by Jean Tirole in 2011, the Institute for Advanced Study in Toulouse (IAST) is a social science research center dedicated to bridging disciplines and inspiring experts to engage with a diverse range of fields.

Its success led to the creation of TSE's Department of Social and Behavioral Sciences in January 2023, a free-thinking hub where researchers can draw on a glittering array of talent, perspectives, and cutting-edge tools.

A voyage of discovery



With storms gathering over the world of money, we cannot afford to drift. The price of failure to navigate shifting financial currents – from volatile markets to runaway debt, trade disputes, and new technologies – is matched only by the rewards for those who find the right course.

No longer just an abstract concept, modern finance is more dominant than ever. It shapes – and is shaped by – the choices of households, firms, and policymakers. At TSE, our research aims to chart its capricious waters, providing the insights needed to steer sound policy and wise decisions.

From inclusive payment systems to sustainable investing, this magazine seeks out silver linings behind the darkening clouds. It shows how TSE experts engage with issues that touch lives, impact individual and collective prosperity and opportunities, and determine how societies adapt to change and weather future crises.

I hope you find the ideas in these pages as stimulating as the questions they address.

CHRISTIAN GOLLIER
TSE Director

MONEY MATTERS

- Banking on the future | 6
- Imagine a world without money | 9

MONEY ISSUES

- Prepare for the storm | 11
- Will we drown in debt? | 13
- Finance for our future | 16
- Minds for markets | 17
- FiRE fighters | 18
- Can finance save the planet? | 20
- What drives ethical investors? | 21
- 'Don't limit yourself' | 22

MONEY WISE

- How thinking shapes what we spend | 24
- Master your budget | 25
- Smart moves | 26

NEW MONEY

- Money for everyone | 30
- Can AI make you smarter? | 32
- Is cryptocurrency a bright idea? | 34
- The cat, the bank and the platform | 35

PLAYLIST

- Money talks | 36

MORAL MONEY

- Money can't buy everything | 40
- Supporting future economists | 42
- Think again | 44
- Bridge the gap | 47

WHO LOOKS AFTER OUR MONEY?

Banking on the future



In an era of topsy-turvy finance, crypto buzz and global uncertainty, it's easy to ignore those working quietly to build our trust. But behind every transaction – from your morning coffee to cross-border investments – central banks stand watch as guardians of stability. The Deputy Governor of *Banque de France* explains why these shy custodians are more important than ever.

WHY DO WE NEED CENTRAL BANKS?

Every time you tap your card, transfer money, or receive a salary, you're trusting that the money will hold its value and be accepted everywhere. That trust isn't automatic. It's anchored by institutions that ensure our monetary system is safe, stable, and reliable.

Central banks manage our money supply and currency, and supervise the commercial banks whose financial services we use every day. This "two-tier" structure hinges on **convertibility**, bringing trust: your

bank deposit can always be exchanged for cash.

HOW ARE YOU TACKLING 21ST-CENTURY CHALLENGES?

Technology is reshaping how people pay. Cash use is falling and we increasingly rely on digital payment solutions based outside Europe. That raises big questions about resilience, privacy, and **sovereignty**. What if a system failed? What if sensitive data flowed abroad? What if payment services were suddenly discontinued?

A **CBDC** is a central bank digital currency – like physical cash, but online.

This is where the digital euro comes in. It will be a **CBDC** issued by the **Eurosystem**: easy to use, safe, free, and privacy-conscious. It won't replace cash, but it will be complementary to it. It won't

replace commercial bank money either. On the contrary, it will guarantee that, like cash, bank deposits remain freely convertible into central bank money, anchoring their value.

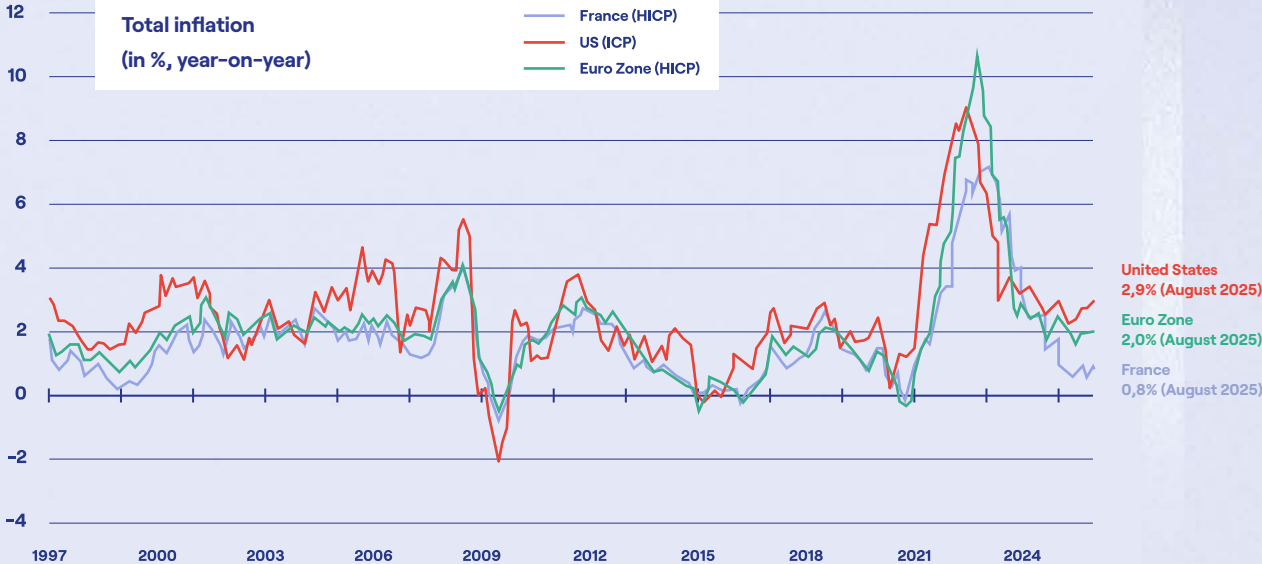
We're also working on a **wholesale CBDC** to modernize our financial markets, taking advantage of **distributed ledger** technology.

Climate change is another financial threat. For instance, extreme weather can affect food and energy prices, making inflation less predictable. *Banque de France* and the Network for Greening the Financial System are developing tools to manage these risks – for example, by **stress-testing** banks under different climate scenarios. →



INFLATION ERUPTS

The recent surge in living costs was driven by Covid-19 supply disruptions, energy prices, and massive stimulus packages. In response, central banks raised interest rates, taking care to avoid stifling growth.



» WHY SHOULD YOUNG PEOPLE CARE ABOUT INFLATION AND INTEREST RATES?

Monetary policy shapes our lives in real ways. Inflation hits young people hard as they generally have tight budgets. Interest rates affect how much you pay on loans and earn on savings. In 2022-23, we raised interest rates to curb soaring inflation. By making borrowing expensive and encouraging saving, higher rates can slow spending and ease price pressures. This worked pretty well in 2023-24, without triggering a recession. Central bank credibility is instrumental in achieving fast disinflation while minimizing the cost for the economy.

ANY ADVICE FOR STUDENTS CONSIDERING A FUTURE IN ECONOMICS OR FINANCE?

Go for it! Economics and finance open up a huge range of careers. You'll learn how to think about systems, analyze data critically, and solve complex, real-world problems. At *Banque de France*, economists work on everything from inflation forecasts to digital currency design. Most continue to do research, because the best way to stay at the knowledge frontier is to contribute to it. ●

IN FRANCE
cash is used for
— **43%** —
of transactions
(down from 68% in 2016)

YOU MIGHT SOON BE
using digital euros
to buy lunch at university!

IN THE EUROZONE
66%
of card transactions
use international
payment solutions such
as Visa or Mastercard

Why not print more money to solve our problems?

From Weimar Germany to Venezuela, history is full of examples where this led to runaway inflation that erodes wages, savings and stability. That's why central banks must be independent from politics. They may buy government bonds, but only at market price on the secondary market, and only to reach their own objective of price stability.

Imagine a world without money



You have no coins, credit cards, or digital wallet to pay for a baguette. So, you offer something else in exchange — maybe eggs, or help fixing a roof. That's barter: a practice as old as humanity. It's also inconvenient. What if the baker doesn't want your eggs or can't wait for a roof repair?

Money solved that coordination problem. It is not just a tool for trade, but a foundational institution of modern economies. In this context, without money, large-scale economic planning, saving, or investment would be nearly impossible. Global trade and economic growth would also stall.

As we explore in this magazine, money is more than metal or code. It's a network of trust. A banknote has no intrinsic value; it works because people believe in the financial system. This allows money to perform three key roles:

- A **medium of exchange** – we can buy and sell without direct barter.
- A **unit of account** – we can use the same measure to value a ticket for a football match, a green energy system, or a company.
- A **store of value** – we can transfer purchasing power over time by saving today and spending tomorrow.

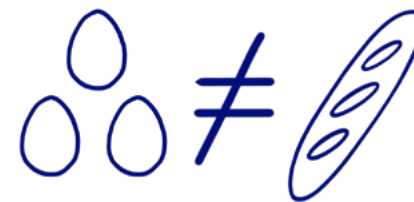
Money has allowed humans to accomplish cooperation on an unprecedented scale: building football stadiums, running hospitals, and launching satellites. It connects billions of people, often without direct contact.

Yet, money is far from perfect. The challenge today is not whether to use money but how to design systems that ensure everyone can fully benefit from its potential. This involves addressing inequalities and fostering more inclusive access to money. ●



Bartering was
sometimes effective,

but not all the time...



JEAN-CHARLES
ROCHET

BEYOND CRISIS

Prepare for the storm

In 2008, a financial hurricane swept the world. Banks failed. Stock markets collapsed. Millions lost jobs, homes, and savings. Since then, regulators have tried to patch up defenses. But have they done enough? We asked a TSE expert on banking crises to consider why the system can seem so opaque, unstable and unfair.

WHAT ROLE SHOULD FINANCE PLAY IN A JUST SOCIETY?

Finance isn't evil. Ideally, the system connects those who have money with those who need it. It supports growth by allocating capital efficiently, across space and time, while managing risk. This helps households save, businesses invest, and governments borrow.

CAN WE PREDICT CRISES?

Not precisely or consistently, but economists try to identify warning signs such as unsustainable debt or **speculative bubbles**, which form when everyone believes prices will keep rising. All bubbles burst... but it's almost impossible to predict the exact timing and trigger.

Crisis often begin with a gradual erosion of confidence before a small shock sets off panic. This is known as a **Minsky moment**, after the economist who warned that long periods of stability lead to complacency, risk-taking, and eventual collapse. →



SURFING THE TSUNAMI

Once bound by borders, banks and technological constraints, money now surges across continents at lightning speed. World leaders bow before it. From debt spirals to climate solutions, this section invites students to think critically about the power of modern finance and how to harness it.

» HOW HAS FINANCE EVOLVED IN RECENT YEARS?

Since the 1990s, three big trends have created a highly integrated global network. **Disintermediation** means transactions increasingly happen outside traditional banks. **Deregulation** relaxed rules on capital flows. **Decomartmentalization** broke down barriers within markets. These changes boosted efficiency and innovation but also helped local crises to spread faster and further.

After the 2008 crash, new rules improved transparency and monitoring. Banks must now hold more **capital** and undergo regular **stress tests**, reducing the risk of **bank runs** or **credit freezes**. But financial contagion remains a threat, especially if consumer confidence and supply chains are fragile.

WHAT ELSE NEEDS TO BE FIXED?

Finance has become too focused on speculative, short-term trading.

It increasingly favors **capital** – mostly owned by the rich – over the **labor** that provides the average person's income. Meanwhile, the complexity of new financial products widens **information gaps** that enrich the powerful and unscrupulous.

High-frequency trading costs
global equity markets
\$5 billion/year

These problems are worsened by **regulatory gaps**, often in new fintech sectors such as **shadow banks**. Without proper supervision, innovations such as **derivatives** and **high-frequency trading** add instability instead of creating value. ●

What more can economists do?

- 1 IMPROVE TRANSPARENCY:** Financial institutions must clearly report risks and exposures.
- 2 EDUCATE CITIZENS:** Financial literacy helps us make better decisions and avoid panic.
- 3 WORK TOGETHER:** Coordinated rules and crisis-response plans help contain damage.
- 4 AVOID COMPLACENCY:** We can't fight only the last war – the next crisis won't look the same.
- 5 INVEST IN RESEARCH:** Understanding crises helps us to prepare, respond and live sustainably.

HOW TO STAY AFLOAT

Will we drown in debt?

FABRICE
COLLARD

PATRICK
FÈVE

As the global debt burden reaches historic highs, can governments keep borrowing without going under? Drawing on official statistics and econometric techniques, Fabrice Collard and Patrick Fève build models to explore how debt interacts with growth, interest rates, and economic shocks. In this interview, they explain that debt brings risks, but it's not inherently reckless.

WHY DO WE BORROW?

We borrow to finance our needs, when we want to study, buy a car, or buy a home. Businesses also need to borrow to carry out their activities.

States must take out loans if tax revenues do not match expenditure. This public debt helps to smooth spending over time, and to cope with crises such as Covid-19 or recessions. It ensures the continuity of public services, and payment of social transfers like unemployment benefits and pensions, which also act as stabilizers in times of volatility.

IS PUBLIC DEBT HARMFUL?

Balanced budgets every year are rare – they can be harmful. Instead of repaying debt, most governments only pay interest on existing debt. Some take on new debt to pay off existing debt, but this can become a dangerous game.

It's important to consider the long-term aims and behavior of the borrower. Debt can be beneficial if used to finance investments – such as infrastructure, education, and green energy – that support growth and productivity.

The economic context also has a huge influence. For example, rising debt is **sustainable** as long as it is outpaced by the

economy, so that growth and tax revenues remain higher than interest rates. However, societies with weak growth will struggle to manage soaring debt without structural reforms.

Currency is another important factor. When countries with weak currencies take on debt in dollars, they may be forced to mobilize more resources to pay the interest due.

WHAT HAPPENS WHEN COUNTRIES CAN'T AFFORD DEBT PAYMENTS?

A debt crisis can occur when countries **default**, failing to meet their obligations. Governments can then be excluded from the financial market, triggering recession and potentially lead to social unrest, as in Greece in the 2010s. In such cases, the International Monetary Fund may propose a rescue plan.

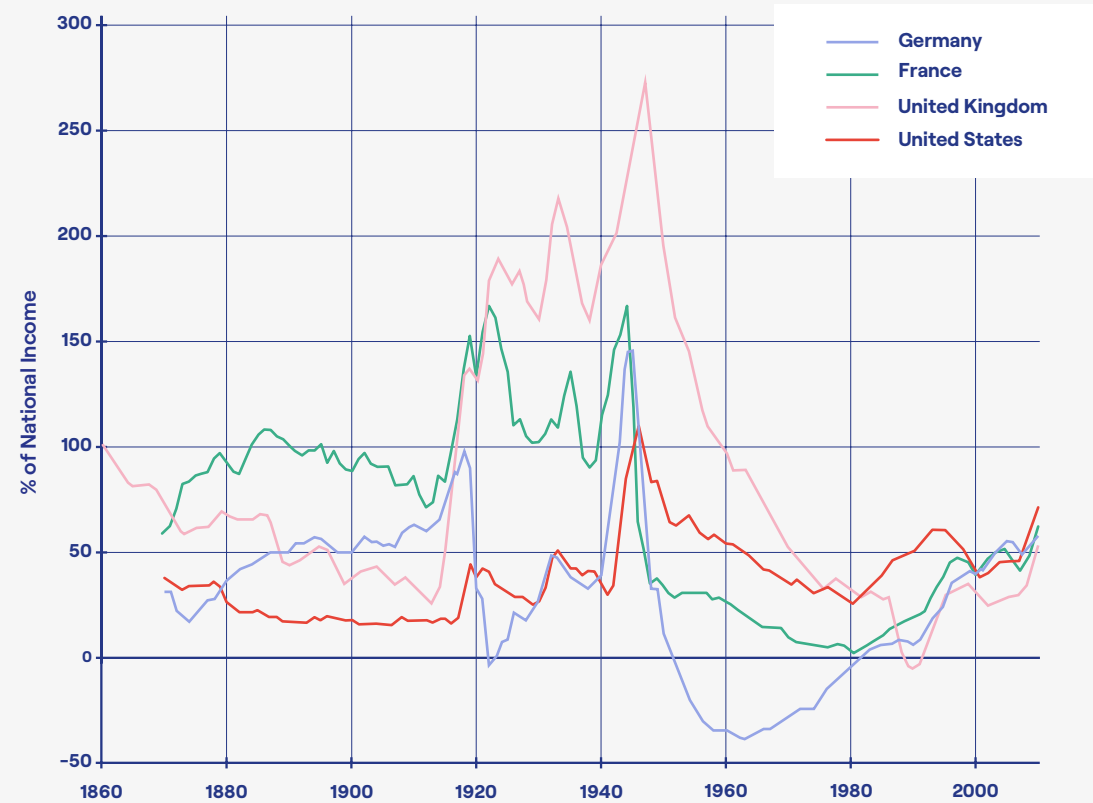
IS DEBT A BURDEN FOR FUTURE GENERATIONS?

Inevitably, yes. But this burden can be lightened if debt is used to finance projects for the future. It's not just a question of finance, but about how investments and projects improve the well-being of future generations. →



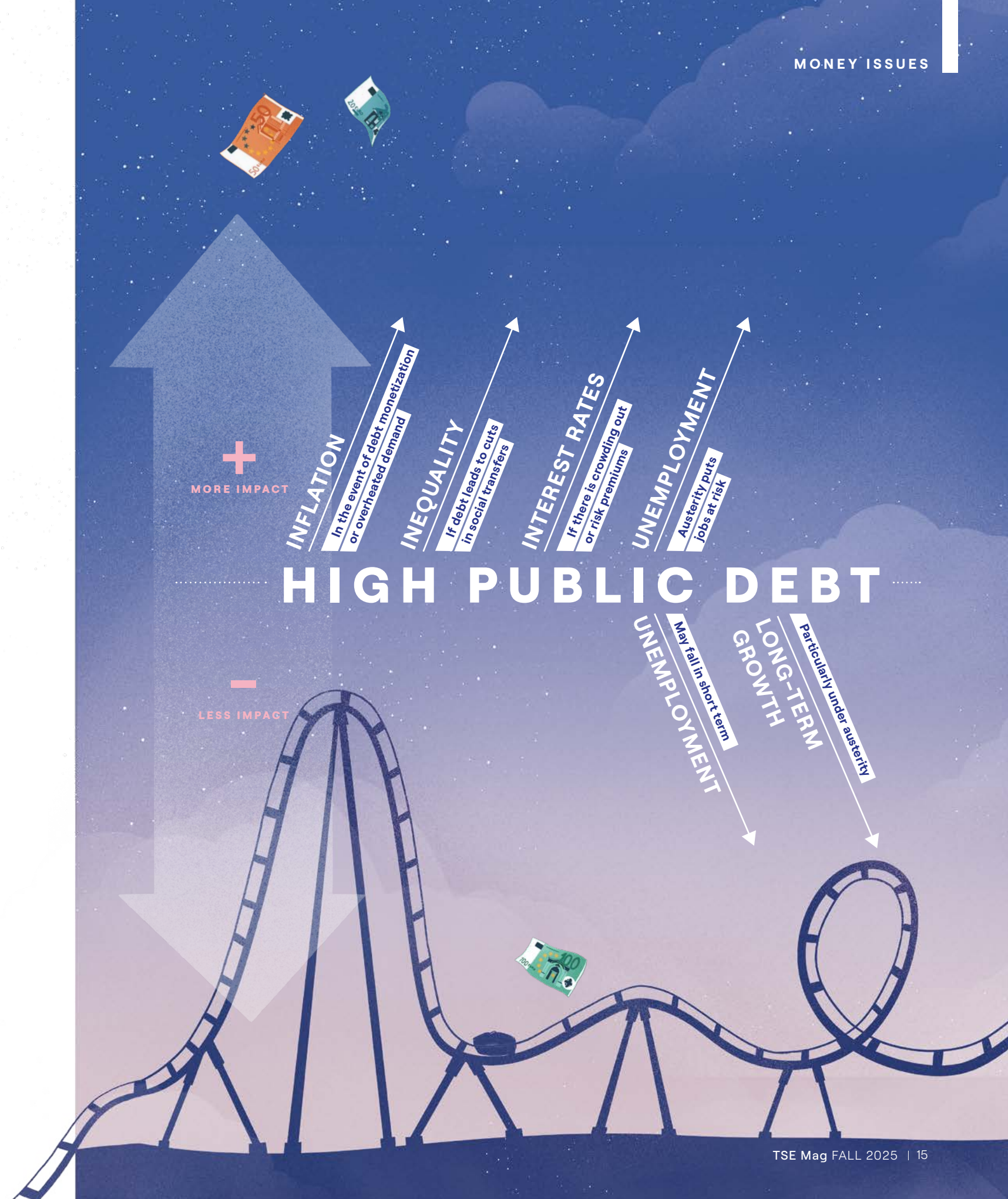
ROLLERCOASTER DEBT

Public debt exploded during the Second World War. France escaped by allowing annual inflation to exceed 50% between 1945 and 1948, imposing heavy losses on bondholders. With public debt on the rise again, how will governments respond?



Has France borrowed too much?

It's not so much the absolute level of debt that's worrying, but the pace at which it increases and the way it's managed. A debt-to-GDP ratio of over 110% is high by historical standards, but France is partly protected by the Euro and the European Central Bank. The cost of this stability is that France cannot devalue its currency to lighten its burden, and faces scrutiny by markets and European partners. If debt rises too fast, or if it mainly finances recurrent expenditure with no lasting effect on growth, confidence can quickly deteriorate. ●



BRIGHT SIDE OF THE COIN

Finance for our future



SÉBASTIEN
POUGET

Doomscrolling, stockmarket drama, and charismatic fraudsters like Bernie Madoff can distort the big picture. Let's also remember that finance is one of humanity's most useful inventions. Away from the roller-coaster financial headlines, there are quieter, more uplifting stories to tell.

Financial markets and institutions allow us to select and support the most promising projects, and to channel risk to those most able to bear it. When used wisely, finance can help people save for the future, implement their dream projects, and recover from hard times. Microcredit can help lift people out of poverty. Green bonds can fund climate action. And responsible investors can wield their portfolios to encourage firms to contribute to society.

Even financial shocks – like those triggered by geopolitical uncertainty – can open up new opportunities. As global capital repositions

itself, Europe has a chance to play a stronger leadership role. Perhaps we can now envision a more resilient, unified EU that funds greater solidarity and long-term projects, and strengthens the euro as an alternative reserve currency.

In the coming pages, we explore the upsides of finance: green investors and TSE students and alumni who use finance to build a better world. You will also learn about personal budgeting tools, and inclusive tech like mobile banking. The future of finance is not set in stone: it will be shaped by the opportunities offered by our choices, our values, and our imagination. •

FORGED IN FIRE

Minds for markets



SOPHIE
MOINAS
Program Head,
Financial Markets and
Risk Evaluation Master

Finance is not just numbers, it's about decisions, behaviors and consequences. As a teacher and researcher, I have witnessed the financial landscape become increasingly complex and interconnected. To keep pace, the next generation of finance professionals will not only need technical skills: they must be intellectually agile, ethically aware, and resilient in the face of uncertainty.

The Financial Markets and Risk Evaluation (FiRE) master's program trains students how to trade and price financial assets, evaluate risk and investment opportunities. Crises like the 2023 Silicon Valley Bank collapse show that applying formulas without critical thinking can be dangerous. That's why FiRE combines theoretical insights – taught by world-class researchers who helped develop them – with hands-on understanding of how markets, investors, and risk behave in the real world. Students learn how to use financial models, but also to question their limits.

97% of FiRE graduates find a job within 6 months of graduation

expertise in **corporate finance**, learning to interpret data to guide strategic decisions.

- **Technological fluency** – in tools such as VBA, Python, and R – for today's financial professions.
- **Communication skills** for explaining analysis to diverse stakeholders.

Ultimately, our goal is not just to prepare students for their first job, but to build an entire career that will span market booms, downturns, disruptions, and innovations. As well as providing cutting-edge skills, we want to inspire the curiosity, integrity, and confidence to shape the financial ecosystems of tomorrow. •

Our program is carefully aligned with industry expectations, allowing FiRE students to pursue a wide range of careers. They develop qualities that employers consistently tell us they value, including:

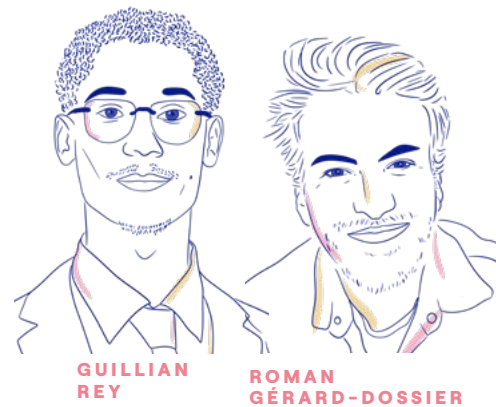
- Understanding **investment strategies** and **asset management** from equities and fixed income to derivatives and alternative assets.
- **Quantitative and computational skills** for evaluating **risk** or **pricing assets**.
- **Financial analysis** proficiency and

CAREER OPPORTUNITIES

Delivered by TSE and Toulouse School of Management, the FiRE program opens up an expansive range of financial futures:

- RISK ANALYSIS
- ASSET MANAGEMENT
- SALES
- BROKERAGE
- TRADING
- DESIGN OF STRUCTURED PRODUCTS
- CONSULTING





DYNAMIC DUO

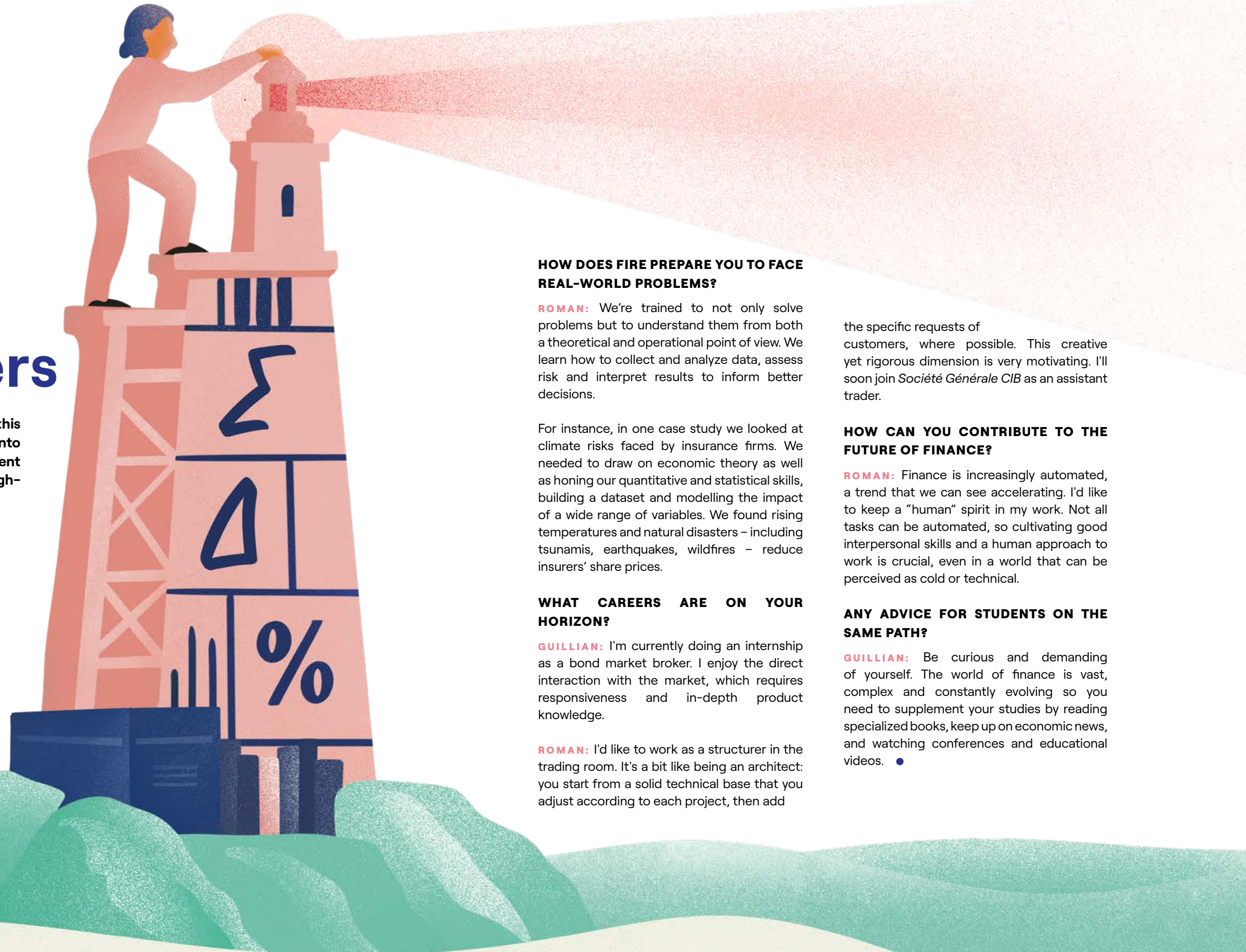
FiRE fighters

Fascinated by finance, risk and markets? In this interview, two FiRE students offer a glimpse into how TSE and Toulouse School of Management expertise can help you navigate this complex, high-stakes world.

WHY DO A DOUBLE DEGREE LIKE FIRE?

ROMAN: The major advantage is complementary expertise. TSE enables us to develop the scientific rigor essential in finance, where there is no room for error. The work in econometrics is particularly instructive, requiring skills highly valued by recruiters. TSM offers a professional approach based on case studies and practical applications.

GUILLIAN: It's a guarantee of quality. Our instructors have solid experience in this field, giving us a precise and up-to-date view of how markets work.



HOW DOES FIRE PREPARE YOU TO FACE REAL-WORLD PROBLEMS?

ROMAN: We're trained to not only solve problems but to understand them from both a theoretical and operational point of view. We learn how to collect and analyze data, assess risk and interpret results to inform better decisions.

For instance, in one case study we looked at climate risks faced by insurance firms. We needed to draw on economic theory as well as honing our quantitative and statistical skills, building a dataset and modelling the impact of a wide range of variables. We found rising temperatures and natural disasters – including tsunamis, earthquakes, wildfires – reduce insurers' share prices.

WHAT CAREERS ARE ON YOUR HORIZON?

GUILLIAN: I'm currently doing an internship as a bond market broker. I enjoy the direct interaction with the market, which requires responsiveness and in-depth product knowledge.

ROMAN: I'd like to work as a structurer in the trading room. It's a bit like being an architect: you start from a solid technical base that you adjust according to each project, then add

the specific requests of customers, where possible. This creative yet rigorous dimension is very motivating. I'll soon join *Société Générale CIB* as an assistant trader.

HOW CAN YOU CONTRIBUTE TO THE FUTURE OF FINANCE?

ROMAN: Finance is increasingly automated, a trend that we can see accelerating. I'd like to keep a "human" spirit in my work. Not all tasks can be automated, so cultivating good interpersonal skills and a human approach to work is crucial, even in a world that can be perceived as cold or technical.

ANY ADVICE FOR STUDENTS ON THE SAME PATH?

GUILLIAN: Be curious and demanding of yourself. The world of finance is vast, complex and constantly evolving so you need to supplement your studies by reading specialized books, keep up on economic news, and watching conferences and educational videos. ●

GREEN IS GOOD

Can finance save the planet?



ULRICH
HEGE

Climate action demands a radical reboot of our economy, changing how we generate energy, build, and grow food. But who will pay? Given the huge investments required, it's time to sow the wealth of private capital.

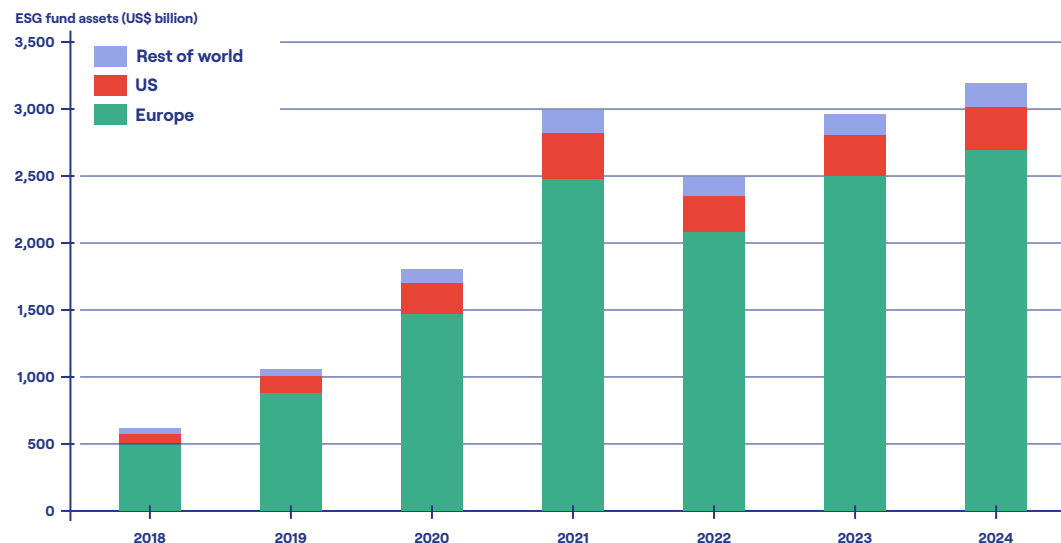


WHAT ROLE CAN STUDENTS AND YOUNG PROFESSIONALS PLAY?

Today's students are tomorrow's policymakers, analysts, and entrepreneurs. As they will be much more affected by climate change, they can demand better ESG (environmental, social and governance) reporting, design new financial products, or launch responsible startups. They can also pressure societies and governments to adopt forward-looking climate policies and to make climate action attractive – not just for idealists, but for all investors – using tools like carbon pricing.

SUSTAINABLE GROWTH

There has been no decline in ESG financing, which gives cause for hope.



HOW MUCH WILL THE GREEN TRANSITION COST?

The world needs \$5 trillion in green investment per year to reach net zero by 2050. That's about 5% of global GDP. To help pay this massive bill, we should look to private finance. In spite of all the recent political and societal setbacks, it is imperative not to lose sight of this objective. It remains entirely feasible.

WHAT'S HOLDING BACK INVESTORS?

Unpredictable policy shifts – like Trump's reversal of Biden's climate legislation – discourage investors who need to know the rules won't change tomorrow. Innovation takes time.

This problem is aggravated by **financial constraints** affecting many decision makers that are individually small but collectively hold a key role for a successful energy transition: small firms, households, and governments and individuals in poor countries. The right mix of public guarantees, subsidies, and energy policies can address this problem.

DOES SUSTAINABLE FINANCE WORK?

By reallocating capital toward green industries, ESG investors are making it more expensive to finance fossil fuels. The transition in energy

and electric vehicles has also been faster and cheaper than expected, driven by innovation, consumers, and governments. This shows us what's possible. However, transparency and regulation are crucial to discourage **greenwashing**.

Finance isn't a magic bullet. But with smart policies, clear signals, and coordinated action, we can unlock trillions in investment with real returns, for people and the planet. I have no doubt that global financial markets have the capacity to unlock the funds needed for an ambitious climate agenda. ●



JEAN-FRANÇOIS
BONNEFON

What drives ethical investors?

Recent experiments by IAST Director Jean-François Bonnefon pose an intriguing question: Do investors care about *doing* good, or *being* good? His results show that investors are willing to pay a premium simply to own

ethical companies, not to change their behavior. This evidence suggests that many ESG investors are not impact-seeking do-gooders, but rather moral consumers seeking a clean conscience through asset ownership. ●

GRADUATES' TESTIMONIALS

'Don't limit yourself'

From the lecture halls of Toulouse to the front lines of today's economy, TSE graduates are driving change in how firms think and act. We spoke to two alumnae who are working for mission-driven organizations where success is measured not just in profit, but in social and environmental impact.



VALÉRIE FURIO
Sustainability
manager at Vinted
**Master in
Environmental
Economics and Policy**

PERSONAL VALUES

TSE provided me with a solid background in economics, as well as the essential foundations and context for understanding environmental issues. I chose to work for Vinted – an online marketplace for secondhand items – because it embraces the circular economy, which corresponds to my personal values. Commitment and creativity are essential to transforming practices in sustainable finance and economics. Our generation has the power to build an economy with inclusive and environmentally friendly values.

SUSTAINABLE PRACTICES

My role as sustainability manager is to advise the company on the integration of sustainable practices, assess the company's impact, and lead initiatives on environmental and social issues. It's a job that also requires close collaboration with different teams to achieve

our objectives, and I enjoy this human side of the job.

CLIMATE CHANGE

Before joining Vinted, I was an analyst at the Climate Policy Initiative, where I analyzed financial and development data to produce reports for international organizations. I also advised on innovative financial mechanisms to increase public and private climate financing.

STAY CURIOUS

Have confidence in yourself. Look for opportunities that suit you, keep learning, and dare to apply even if you don't have all the skills required. Boldness opens doors!



JOANNA MORAIS
Data & Analytics
Manager at HelloAsso
**PhD in Applied
Mathematics and
Master in Statistics
and Econometrics**

THE POWER OF DATA

HelloAsso is a social economy company that supports civic engagement by helping charities, non-profits and community projects to finance their activities. I manage a team of data analysts and data scientists whose mission is to

help our colleagues manage their business and make the right decisions to better meet the needs of community associations. For example, we help to identify associations that are only partially using the platform and that could raise more by following the example of similar associations.

ETHICAL ANALYSIS

We strive for ethical use of data. What really changes the game is that a company's strategy is driven not by the desire to maximize its sales, but by the desire to maximize its impact, and this has consequences at every level, including data.

NO LIMITS

We shouldn't limit ourselves to business as usual. A business model based solely on the generosity of users may seem unrealistic, and yet HelloAsso has been in existence for 15 years, offering its services and solutions free of charge to 400,000 associations. We employ over 160 people, and our quality of working life is exemplary.

A BETTER SOCIETY

I'm a volunteer at Data for Good in the Bordeaux community, where we're working on projects that prove data can be very useful in building a better society. For example, we've contributed to the creation of a forest fire detection tool to help firefighters. Whether they like it or not, organizations must adapt and align themselves with the challenges of our time. Don't neglect this power, because an organization that can't recruit or retain talent won't survive. ●



TIZIANA
ASSENZA

How thinking shapes what we spend



Education, qualifications, and financial resources form the foundation of a strong future. But to make the most of them, we also need to understand how we make decisions, especially under pressure. This can be just as life changing as learning how to manage money itself.

Making informed financial decisions starts with understanding how our minds process risk, reward, and time. Which patterns of thought help us? Which ones lead us astray? Even well-informed people can make financial mistakes. **Behavioral economists** have shown how the brain often relies on mental shortcuts, known as **heuristics**, which allow for fast, intuitive decisions. While these shortcuts can be useful, they can also lead to errors, especially in complex situations when it is better to slow down and think more carefully.

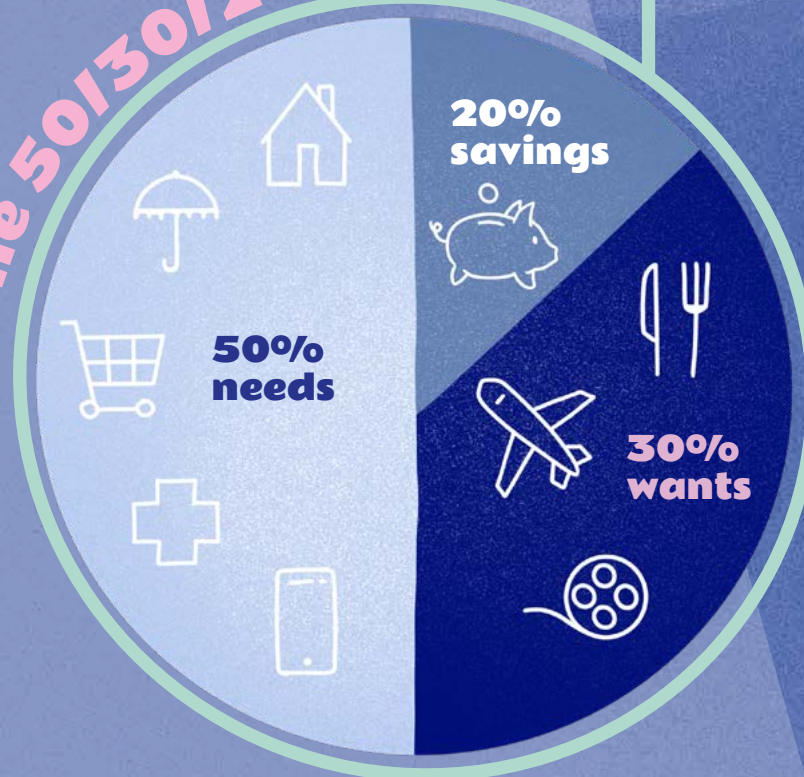
In my own research, we found people tend to misjudge wealth, focusing on visible assets even when these are offset by significant debts. This **"leverage bias"** was stronger when participants relied more on intuitive thinking. Those who engaged in more reflective thinking made more balanced financial judgments.

Financial knowledge is important, but so is the ability to recognize when our thinking is rushed or biased. Being able to pause and shift into a more reflective mindset can make a real difference in everyday economic decisions. •

Master your budget

Created by US Senator Elizabeth Warren in 2005, the **50/20/30 rule** is a useful guide to help people manage their money. Of course, it should be adjusted according to individuals' incomes. Discover it below, with some useful tips!

The 50/30/20 rule



1

Think twice

Reflect before big purchases or taking on debt.

2

Check yourself

Review your spending and savings. Are you acting on facts or feelings?

3

Look beyond tomorrow

Save for future goals.

4

See the big picture

Focus on your net worth, not just assets or debts.



IT ALL ADDS UP

Take control of your finances with this budget calculator!



Smart moves

PLANET MONEY



This podcast is not just about figuring out the economy, it's about understanding the world. Each 30-minute episode links various topics to the economy and explains current news.



Money

Discover tips and tricks to manage your money - from student loans to buying a car. Throughout life, you'll face big financial decisions; here's how to avoid common mistakes.

ONCE UPON A DIME



The Federal Reserve Bank of New York has created a free comic book series for students and teachers to raise awareness about careers in economics and finance. This edition explores how money is created.

money A USER'S GUIDE

Discover this must-have book to take control of your personal finances. It will offer practical advice on several aspects of managing your money: housing, debt, money and mental health, money and love...



MONEY explained

Global finance can encourage crime due to the ease of cross-border transactions and complex financial structures. TSE's **Emmanuelle Auriol** tells Stupid Economics why drug cartels have been quick to take advantage (subtitles available).

This five-episode Netflix series explores how we spend, borrow and save money. Learn about student loans, credit cards and financial scams - and how to avoid them!



Controlling prices

Can you survive the gig economy? That's what this game sets out to explore. You'll face urgent financial challenges, like coming up with €1,000 for rent in just a week, and must take on gig jobs, such as driving for Uber, to try to make ends meet.

Ever wanted to take control of a central bank? In this free online game, you'll practice managing prices and learn how changes in the key interest rate affect the economy. Your mission: keep inflation close to 2%.

budget BINGO

 Open a savings account	 Set 1 short-term and 1 long-term goal	 Discover your dream college's tuition cost	 Budget your weekly grocery shop
 Donate or sell items you no longer use or need	 Offer to do extra chores for pay	 Monitor your bank account activity	 Earn and donate €20 to your favorite local charity
 Create a smart budget for your next trip	 Save by making coffee and meals at home rather than eating out	 Plan a no-spend day	 Apply for a part-time job, or a summer job
 Read, watch, play - unlock new money skills	 Keep track of ALL of your spending for 1 week	 Take advantage of coupons and promo codes	 Start a savings challenge

SCAN TO DISCOVER ALL OUR
POP CULTURE LINKS AND
GET SAVVY WITH MONEY.





ARE YOU READY FOR WHAT COMES NEXT?

What happens when wallets turn digital, banking fits in your phone, and robots are running the markets? For students diving into a turbulent world flooded with code and algorithms, financial innovation isn't a future challenge – it's already here. TSE wants to equip you to find the opportunities bubbling up in this strange new landscape.

In this section, we explore three volcanic hotspots in the fintech archipelago: crypto, mobile money and AI. Can blockchain deliver trust without banks? Will digital finance empower the developing world, or widen existing gaps? Will AI help us make better choices?

FINANCIAL INCLUSION

Money for everyone



The greatest financial revolution may not be on Wall Street – but in rural Kenya, Brazil's shopping malls and Peruvian markets. We asked a TSE development economist how digital innovation is changing the way people use money in the Global South.

WHY IS MOBILE MONEY SO TRANSFORMATIVE?

It's about access. In many countries, banking services don't reach rural areas or poor households. **Mobile money** lets users store and transfer funds by mobile phone, without using a traditional bank account.

Economists have shown that mobile money boosts **financial inclusion** and allows faster, cheaper remittances. This can lift people out of poverty, support small

businesses, reduce gender inequality, and help families to survive crop failure, drought, and medical emergencies.

WHAT'S THE SECRET OF SUCCESS?

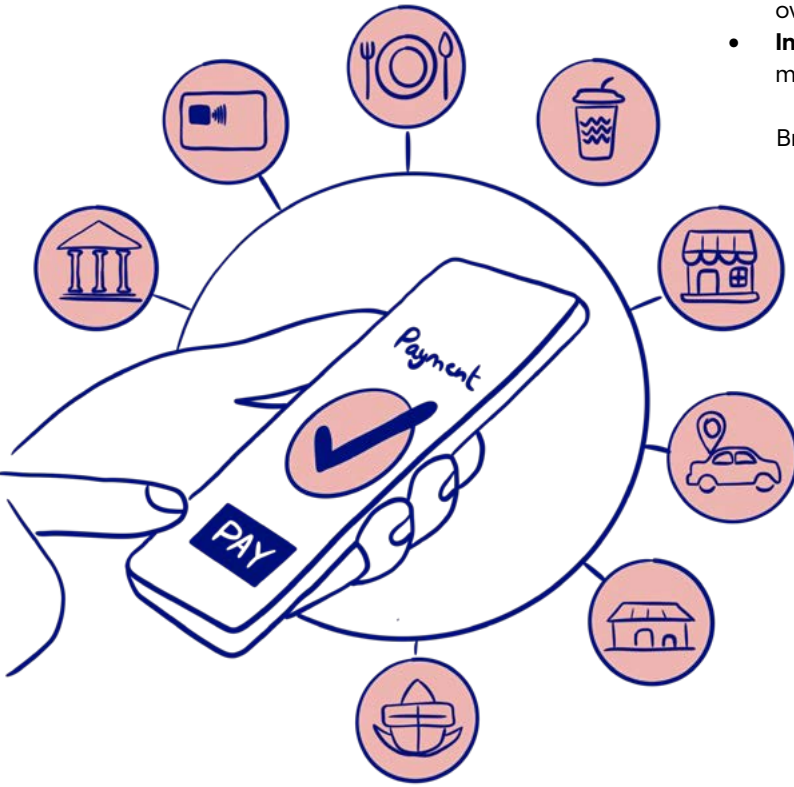
There's no one-size-fits-all model, but our study of four leading payment systems identified several key ingredients:

- **Digital design** – Is the system easy to use? Are fees affordable?
- **Smart regulation** – Is there a legal framework that balances innovation with oversight?
- **Interoperability** – Can users transfer money between platforms and banks?

Brazil's Pix succeeded by combining public leadership with **interoperability**. Kenya's M-Pesa, by contrast, was a private initiative that grew fast in a lightly regulated space. Both worked, but for different reasons.

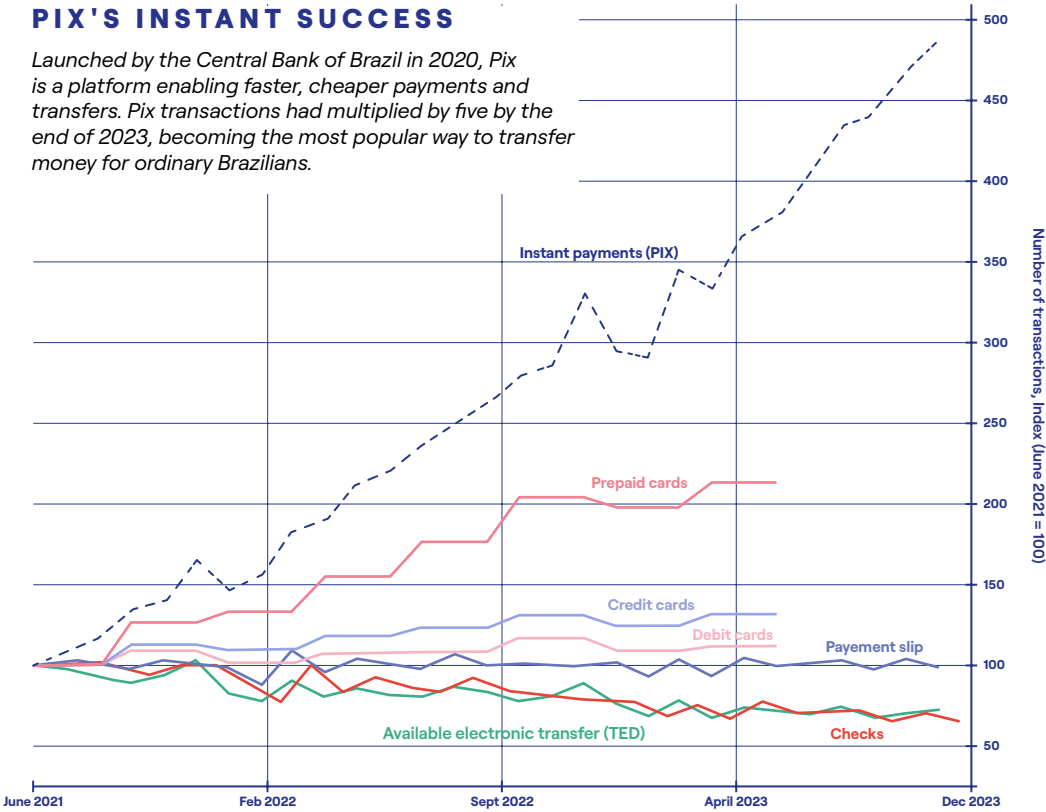
HOW IS MOBILE MONEY LIKELY TO EVOLVE?

Mobile services are expanding to include credit, insurance, and even investment products. In some places, mobile finance may leapfrog traditional banking. This raises the bar for regulators to ensure digital infrastructure is equitable and secure.



PIX'S INSTANT SUCCESS

Launched by the Central Bank of Brazil in 2020, Pix is a platform enabling faster, cheaper payments and transfers. Pix transactions had multiplied by five by the end of 2023, becoming the most popular way to transfer money for ordinary Brazilians.



How mobile money works

1

A user deposits cash at a mobile money agent, like a shop or kiosk.



2

The agent credits the user's mobile wallet via SMS or app.



3

The user can now send money, pay bills, or withdraw cash from another agent.



4

Transactions are secured by PIN codes and mobile networks, not by banks.



ROBO-ADVISORS

Can AI make you smarter?

MILO
BIANCHI

Artificial intelligence is adept at fast finance, offering cheap, personalized advice in seconds. How will algorithmic advice impact humans? The TSE co-author of a major study on human-robot investment decisions finds grounds for optimism.

WHAT IS A ROBO-ADVISOR?

Robo-advisors are digital platforms that use algorithms to suggest how you should invest. They typically assess your financial literacy, **risk tolerance**, and investment goals using questionnaires, before proposing an optimized portfolio.

HOW DID PEOPLE RESPOND?

They paid more attention. Robo users increased their trading activity, keeping investments more aligned with long-term goals. They also profited from a significant increase in their annual returns.

DOES THIS MEAN ROBOTS SHOULD TAKE OVER?

We found interaction matters more than pure automation. People don't want to give up control – but they benefit from **smart nudges**, explanations, and transparent decision processes. Users can reject or adjust proposals, so it's not a robot takeover – it's a conversation.

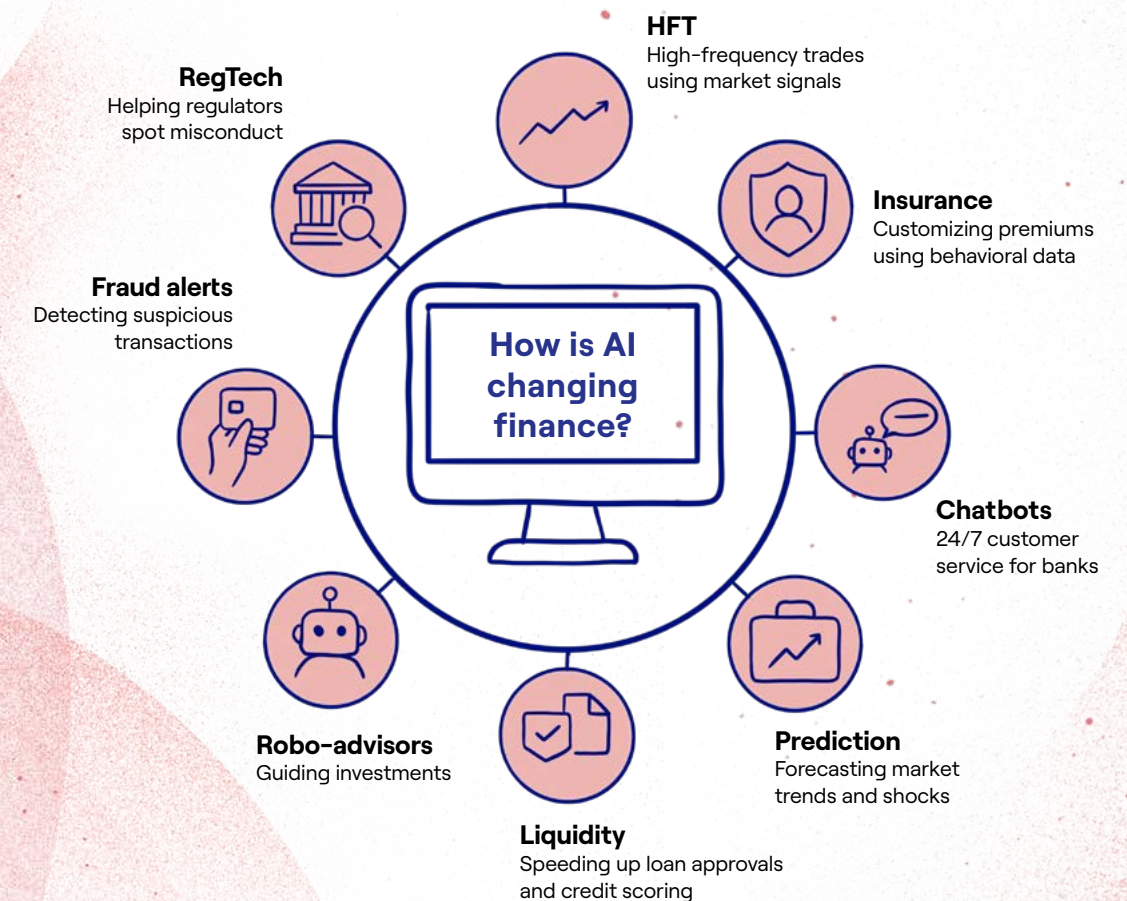
CAN THIS TECH HELP EVERYONE?

Financial inclusion is one of AI's exciting promises. Robo-advisors have low fees and require

minimal starting capital, so they can improve access to financial advice – especially for young or lower-income investors. But the systems must be carefully designed with clear interfaces, data protection, and smart regulation.

WHAT ARE THE DANGERS?

People may become too passive or ignore prompts when under stress. Worse, they may blindly trust advice without understanding it. AI systems can also amplify **herding behavior** and biases that destabilize markets. That's why human oversight, **explainable AI**, and transparent guidelines are so important. ●



DIGITAL COINS

Is cryptocurrency a bright idea?



CATHERINE CASAMATTA

In just over a decade, Bitcoin has gone from an obscure internet experiment to a trillion-dollar sensation. Today, there are thousands of digital coins, sparking fierce debate about the meaning of money. A TSE finance expert unpacks what economists think.

WILL CRYPTO REPLACE TRADITIONAL MONEY?

Despite the hype, cryptocurrencies have not revolutionized money. Most are too volatile to be a reliable store of value – no one wants their salary or rent pegged to Bitcoin if it swings 10% in a day – and payments can be slow and costly. Prices are highly speculative, so they can crash suddenly. Other risks include market manipulation, financial exclusion, and lack of guarantees if wallets are hacked.

SO WHAT'S ALL THE FUSS?

Blockchain is an impressive innovation, with potential applications including programmable money (using smart contracts), **peer-to-peer**

finance, secure information storage, and central bank digital currencies (CBDCs).

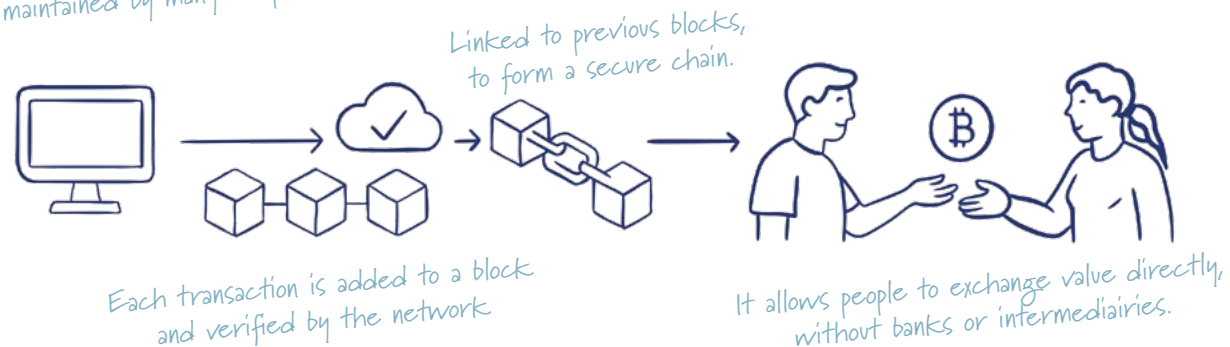
However, many problems remain. For example, my research shows how **blockchain forks**, that reflect a breakdown in consensus on the transactions' history or protocol rules, could slow down the adoption of this technology and of the cryptocurrencies that use it, and add to financial risk. Environmental impacts are also huge – **proof-of-work** validation can consume more electricity than entire countries.

CAN CRYPTO PLAY A ROLE WHEN TRUST BREAKS DOWN?

Digital assets can protect citizens from predatory governments, hyperinflation and political instability. This may explain their popularity in fragile economies like Argentina and Venezuela. But crypto can also undermine monetary policy or sustain illegal activities. ●

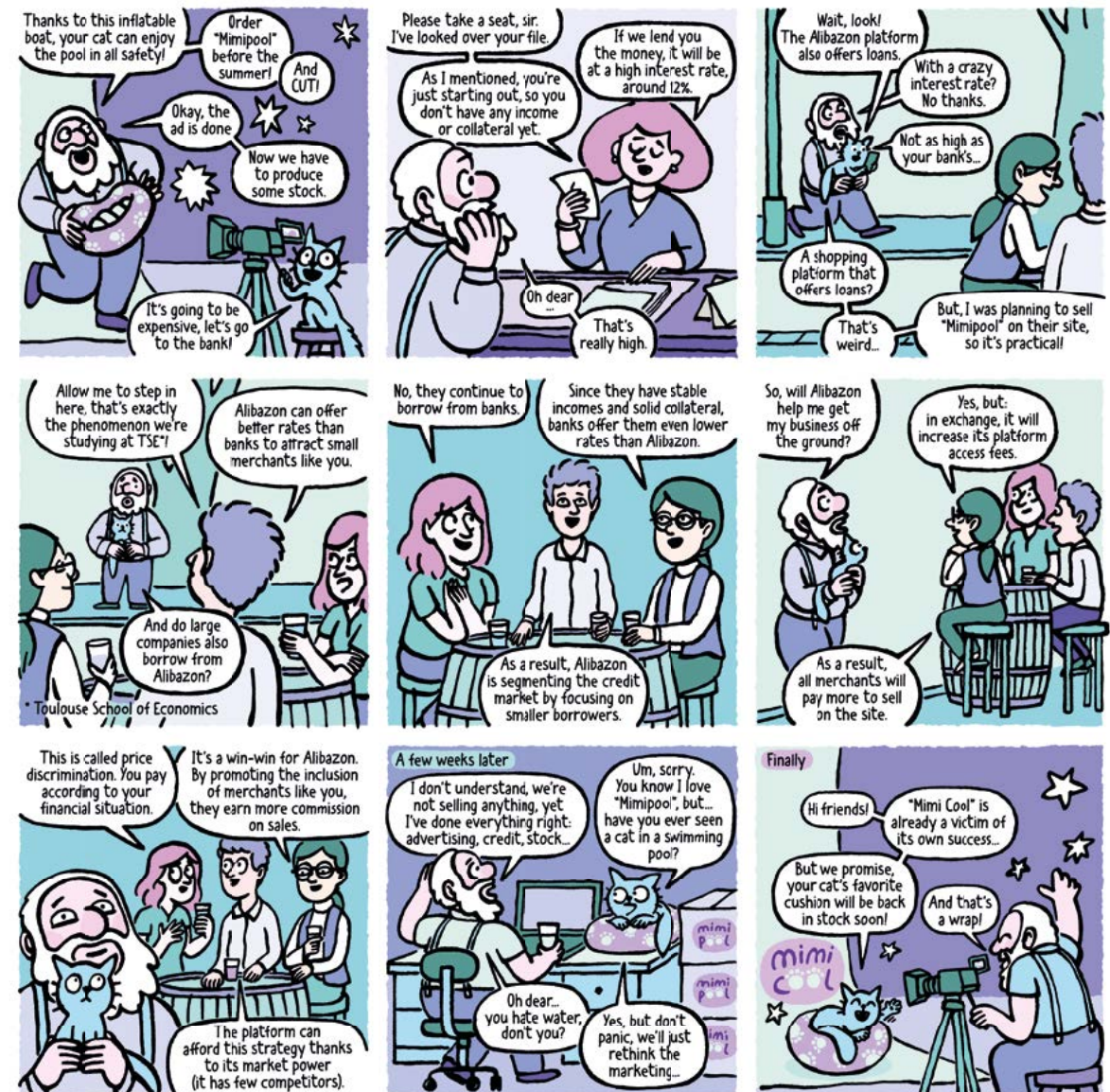
How blockchain works

Blockchain is a digital ledger maintained by many computers.



What if banks weren't the only ones handing out loans? Tech and e-commerce giants have stepped into the lending game, reshaping how money moves. So how does it work? And what's at stake? Follow the story of Max the merchant and Mimi the cat in this comic strip from *Science Story*.

MATTHIEU BOUVARD,
CATHERINE CASAMATTA,
RUI XIONG



Created by Perceval Barrier, this comic is part of the Science Story series by Exploreur (ComUE of Toulouse). It was produced with support from the French National Research Agency (ANR) through the FINRIS and CONNECTS projects.





THE PLAYLIST

MONEY TALKS

From coins to credit, money makes the world - and music - go round. These tracks tackle wealth, debt, greed, and everything in between. Let's give our economics a sound foundation.

Play it loud!





MAKE IT COUNT

Money and finance are essential to modern life, but they are not ends in themselves. They are instruments – powerful ones – that should serve society. Whether we're allocating resources, managing risk, or investing in the future, the choices we make as individuals, voters, and economists will frame the world to come.

As students, your task is not just to master these tools, but to use them with care, creativity, and conscience. The future is in your hands – not just as consumers or workers, but as citizens capable of shaping the rules of the game.

WHAT'S FOR SALE?

Money can't buy everything



This magazine has explored how money and finance impact our lives, from national debt to family shopping lists. But as citizens aiming to build a better future, we must also consider the moral implications. TSE experts often explore beyond the comfort of their own discipline, so we asked IAST psychologist Léo Fitouchi and TSE Nobel laureate Jean Tirole to reflect on the limits of market solutions and whether money undermines our most sacred values.

WHY CAN'T THE 'INVISIBLE HAND' FIX ALL OUR PROBLEMS?

JEAN: Many social scientists, politicians and religious leaders claim that markets promote unethical behavior. However, it's important not to confuse moral concerns with more straightforward problems caused by lack of competition, accountability, or freedom.

Economists can often provide solutions to these market failures with carefully designed regulation. Pollution is a classic example. Emitting carbon dioxide may boost a factory's profits, but society bears the long-term cost. To fix this kind of **externality**, institutions such as laws or carbon taxes are needed to align private incentives with public good.

Products have externalities if there are impacts that are not reflected in market prices

LÉO: Markets are good at efficiency: making the cake as big as possible with minimum waste. But human beings also want the cake to be shared fairly, respecting people's moral rights to goods like food, shelter, and healthcare. Markets don't care about justice – they allocate goods to those who can pay and exclude those who can't. An efficient market can bake more bread than ever and still let people starve.

Markets create powerful incentives but they may backfire. When we put a price on something, we risk "crowding out" more civic motivations like people's sense of duty toward the community. Experiments have shown, for example, that paying people for blood donations can lead them to give less, not more – because the original reason they gave was not money, but a sense of duty toward people in need.

DO MARKETS OFFEND OUR MORAL INSTINCTS?

LÉO: Markets are a recent invention. For most of our evolutionary history, humans lived in small groups without markets. Economic life was based on cooperative hunting, gathering, and the sharing of resources based on social obligations rather than prices or formal contracts. Now, that doesn't mean markets are "unnatural". Like writing, roads, or computers, markets are just a tool to serve human goals – such as increased access to resources.

But markets can clash with other human motives, such as our sense of justice. People often disapprove of unfair inequalities produced by markets. More fundamentally, people also reject the idea that some things should be for sale. Buying votes, for example, would give full political power to the rich;

buying organs can pressure the poor to sell parts of their body – both of which feel unjust to our moral psychology.

JEAN: Markets should reward those who have something valuable to offer in which they have invested skills, effort, capital, or ideas. But wealth may come from activities that do not create social value, or even destroy it – as we have seen with unpriced carbon emissions.

High inequality also threatens social cohesion and democratic fairness. That's why developed countries use taxes to redistribute income and invest in universal health care and education. Markets also often fail to adequately provide non-excludable and non-rivalrous public goods like national defense or clean air.

WHY IS IT IMPORTANT TO REFLECT SCIENTIFICALLY ON THE ETHICS OF MONEY?

JEAN: Economics uses scientific methods – models, data, experiments – to understand human behavior. It offers tools to think critically about where markets are appropriate and where other mechanisms are needed. This involves moral choices about which outcomes we value, and which tradeoffs we accept.

Money is a tool, not an objective. Rather than using money as a scapegoat for society's failures, we must pressure the State for better regulations and clarify our moral preferences. For example, will you still support climate policies if they hit your wallet? We must also confront difficult moral choices. As the Covid episode reminds us, doctors are familiar with the difficulty of using limited resources to save lives, even if it conflicts with their belief in the sanctity of human life.

LÉO: Social scientists can't decide what kind of society we ought to build – that's a question for democratic debate and moral philosophy. What they can do is map out our options and show, with rigorous methods, the likely consequences of each path. This can help us make collective decisions that lead to outcomes we consider morally just, or consistent with our values. ●



Supporting future economists

Our birthplace, nationality and income should not prevent us from aspiring to a first-class education. This was the deeply held belief of Jean-Jacques Laffont, founder of TSE. Created by his wife to honour this dream, the Jean-Jacques Laffont Foundation has since been integrated into the "Giving to TSE" individual donation program managed by TSE. Colette Laffont, professor of mathematics at TSE and the University of Toulouse Capitole, tells us about the purpose of this initiative and two beneficiaries share their experiences.



COLETTE LAFFONT

“My husband was very sensitive to the challenges facing emerging countries. It was in this spirit that, in 2005, after his death, I created the Jean-Jacques Laffont Foundation. The aim was to help students from these countries to come and study in Toulouse,” explains Colette.

Since its creation, the association has funded scholarships for 35 master's students. Now, the "Giving to TSE" scholarship committee continues this work by meeting each year to award funding based on academic excellence and merit.

Colette would like to express her "gratitude to the donors, without whom none of this would have been possible."

Find out more about the scholarship

Each year, the Jean-Jacques Laffont Foundation - TSE awards one or more scholarships (€5,000) to master students based on academic merit. These scholarships are made possible thanks to the support of generous donors through the Giving to TSE fundraising campaign.

For more information on the application process, scan this QR code.



ANUKRITI GOEL
scholarship recipient
Master in Environmental
Economics



“After completing a degree in mathematics and a master's in operational research at the University of Delhi in India, I wanted to study in Europe. However, the exchange rate at the time made this very difficult. The Jean-Jacques Laffont scholarship was a great relief, allowing me to focus on my studies without having to worry about financial issues. It also allowed me to explore new opportunities during my master's degree.

I now work as a consultant at AND International in Paris on policy evaluation projects for several directorates-general, as well as the Joint Research Center of the European Commission. My work focuses on topics such as climate change and agriculture. My plans are to progress in my position, deepen my knowledge in these sectors and contribute to the development of good policy decisions.”



CORALIE SORBET
scholarship recipient
Master in Data Science

“I found out about the Jean-Jacques Laffont scholarship through the school's social media and emails. It has been a huge help throughout the year, enabling me to better manage my daily expenses, particularly for accommodation, living costs, and transport. Thanks to this support, I was able to start the year with greater peace of mind and remain focused on my studies.

I am currently completing my master's through a work-study program as a data scientist at Airbus, after completing a dual bachelor's degree in eco-math. After that, my goal is to either stay at Airbus or move to Paris to work as a data scientist in the banking or luxury goods sector.”

Reflect, discuss, challenge...

Economics is not just about getting the 'right' answers, it's about learning to ask better questions. Take a moment to think about what you've read in this magazine. Reflect on ideas, discuss with peers, and challenge perceptions. Can you connect the dots between your personal decisions, systemic structures and moral debates?

MONEY MATTERS

BANKING ON THE FUTURE

- What key functions and traits make money valuable in society?
- How do central banks shape the economy?

MONEY ISSUES

TWO SIDES OF THE COIN

- Are we prepared for the next financial crisis, and what lessons must we learn from the past?
- Can finance solve global challenges like climate change?

MONEY WISE

EARN, SPEND, SAVE

- How financially literate are you, and how might this impact your future?
- How can we help people make better financial decisions?

NEW MONEY

MONEY'S DESTINY

- Will digital money and crypto replace cash, or just add complexity?
- Who do you trust more with your money: banks, tech platforms, or algorithms?

MORAL MONEY

WEALTH, VALUES AND SOCIETY

- Does money make us happy?
- Is economics a moral science, and should it strive to be one?

Le Point



FUTURAPOLIS

Planète

Conferences | Debates | Encounters

When science speaks

November 12–15, 2025

at Sciences Po Toulouse,
Toulouse School of Economics and
Toulouse Capitole University

FREE ENTRY

Register online at *Le Point Événements*

#Futurapolisplanete   



NEW

TSE launches its Master of Science from September 2026

At Toulouse School of Economics, we see economics as a driving force for the common good. We believe in building bridges and nurturing collective thinking.

**Come meet us
at upcoming events:**

THE EUROPEAN EDUCATION FAIR IN PARIS
November, 21-23, 2025

INFOSUP TOULOUSE
January 8-10, 2026

TSE OPEN DAY
February 14, 2026

Three opportunities to talk with our students and faculty and find out everything you need to know about our programs, career paths, and the high employability of our graduates.

CHAT WITH OUR STUDENTS!

Scan the QR code to connect with TSE ambassadors. Hear about their experiences and discover what student life at TSE is all about!





Toulouse
School of
Economics

For the Common Good

**TSE MAG,
WINNER OF
AN ARCES AWARD**



**GET IN TUNE
WITH OUR
MONEY PLAYLIST**