

BI-ANNUAL CONFERENCE | THE GLOBAL ECONOMY IN THE MIDST OF SHOCKS: BETWEEN UPHEAVAL AND RESILIENCE

TRANSCRIPTION

0:00:06 – Emmanuel Laborde

Hello everyone and thank you for joining us for this latest half-yearly BNP Paribas Economic Research conference, as we approach the end of June – or rather, mid-June – on this Tuesday afternoon. We are extremely pleased to see so many of you tuning in, as always. We are here live to discuss two key topics from the economic news, which we will explore in more detail. Before we proceed, I would like to say a few words about our audience, as more and more of you are following us.

As you are aware, this event has been accessible not only to BNP Paribas employees but also to our clients for some time now. This event is therefore now open to the general public. A brief moment for an important reminder: the disclaimer under the Markets in Financial Instruments Directive (MiFID II). We wish to clarify that the various presentations you are about to attend, as well as the comments made during this conference, do not constitute investment advice. Having said that, let us move on to the agenda. Today, we will be discussing two topics in depth, both of which are, once again, highly relevant to current events. For several half-years now, economic developments have significantly influenced our editorial focus. The first topic is the global economy in the context of the energy crisis. Of course, this title refers to the conflict in Iran at a rather unusual juncture, especially given that developments over the past 48 hours have been moving in the right direction – or so we hope, at any rate. Nevertheless, oil prices have been consistently hovering around, or even above, \$100 a barrel for many weeks and months, with a correction since Sunday evening – although this is merely a temporary blip for the time being.

These elevated prices have undeniably affected the world's economies. We shall try to identify the specific consequences and then see what opportunities this might open up for us, particularly in relation to fossil fuels.

The second topic, which is consistently relevant in our lives and both fascinating and frightening, is artificial intelligence – AI, particularly generative AI – which is shaping up to be an extraordinary driver of growth, with colossal investment currently taking place in the United States, China and Europe. We will explore how it is transforming our economies and the opportunities it presents. Additionally, please don't forget that at the end of each session – as this is an interactive event – we'll be very happy to answer your questions. You're welcome to ask them at any time.

The teams of moderators are working behind the scenes, keeping cool – lucky them – and collating your questions. We'll set aside five minutes at the end of each presentation to answer them. It's time to begin. I believe that at 4:04 p.m., you're all here.

First up, we'll start with a brief introduction from BNP Paribas' Chief Economist, who, as is customary, will open this half-yearly conference. That's Isabelle Mateos y Lago. Jingle!

Just enough time for a quick sip of water, and here we are back on set. Hello, Isabelle.

0:03:01 – Isabelle Mateos y Lago

Hello, Emmanuel, hello everyone.

0:03:02 – Emmanuel Laborde

Let's start with a few words to set the scene, if you don't mind, particularly on this first topic. We're going to talk about the conflict in Iran and its economic consequences. Among the indicators we have – indicators reflecting the health of the global economy – are, of course, the stock market indices. Whether in the US on the Nasdaq or the Dow Jones, or in France or across Europe with various indices, we're approaching historic highs. This stands in contrast to the situation in Iran, which remains exceptionally serious and ongoing.

Yet the situation there seems to be improving. Is there a potential disconnect between the perception of the stock markets and the reality we are experiencing?

0:03:40 – Isabelle Mateos y Lago

That's an excellent question that I'm asked very often, and I think that, in truth, there is no disconnect. First of all, while the performance of the US stock market is indeed President Trump's favourite indicator, there are significant differences in the composition of stock market indexes and economies. In fact, the tech sector has been the primary driver of the stock markets' upward trajectory. So, the more tech there is in a market, the higher the returns have been since the start of the year.

For example, the Nasdaq is up by nearly 40 percent, the S&P 500 by nearly 20 percent, whereas European markets – where there is less tech – have risen by only a few basis points since the start of the year. Ultimately, all of this is fairly consistent with the outlook for growth, which, although negatively affected by the conflict in Iran, remains positive.

The second point, which serves as important context for our discussions throughout this conference, is that we are actually facing two simultaneous shocks. We are dealing now with what I would call a cyclical shock. The most recent of these is the war in Iran and its impact on energy prices and inflation. However, underlying this are profound structural shocks – geopolitical, economic and technological paradigm shifts – that create such a pressing need to adapt that they stimulate investment and economic activity. So, what we're going to do over the next hour is to try and unpick these two elements to shed some light on the economic outlook.

0:05:18 – Emmanuel Laborde

Between optimism and a hint of concern, where does the balance lie? That's what we're going to try and unpick. In this first segment, we'll be looking specifically at the conflict in Iran with Guillaume Derrien and Pascal Devaux. Hello to you both. Guillaume, of course, will be covering the economic aspect.

0:05:30 – Guillaume Derrien

Yes, hello Emmanuel, hello everyone.

0:05:32 – Emmanuel Laborde

And with you, Pascal, whenever we see you, it's always to talk about energy and oil.

Pascal Devaux

Hello Emmanuel, hello everyone.

Emmanuel Laborde

We'll start with you, Pascal, if you don't mind, as I was talking about indicators – specifically, stock market indices – but there's another one that serves as an excellent gauge of the global economy's health: the price of energy. In this context, the prices of commodities such as oil and gas have seen huge increases since the blockade of the Strait of Hormuz.

The primary question is this: what happened in the Strait of Hormuz represents an entirely unprecedented situation, both in terms of energy and the economy.

We've never seen anything like it before.

0:06:09 – Pascal Devaux

In terms of energy, it is true that this is an unprecedented shock, as around a quarter of global oil trade passes through the Strait of Hormuz. So, it is really significant. It's also worth noting that the shock was somewhat mitigated by three factors. Firstly, there were alternative pipelines, particularly in Saudi Arabia and the United Arab Emirates. A second mitigating factor was the significant reduction in strategic reserves held by OECD countries, particularly the notable decrease in US strategic reserves.

And finally, the third factor was a significant reduction in Chinese imports, and we know that China is one of the world's leading oil importers. These factors helped mitigate the impact. Nevertheless, prices still reached very high levels.

Between early March and late June, the average price of a barrel of Brent crude exceeded 100 dollars. This is indeed a

considerable figure. It can be said that this situation is unsustainable without the reopening of the Strait of Hormuz, and we are likely to encounter mounting tensions in the coming weeks.

0:07:20 – Emmanuel Laborde

We are therefore anticipating this reopening – we’re keeping it conditional – as it’s scheduled to take place on Friday, although there have already been numerous announcements to that effect. Crude oil prices have therefore risen sharply, as you’ve pointed out, and the prices of refined products – which have a direct effect on consumers and the economy – have also seen very high inflation.

0:07:36 – Pascal Devaux

Yes, in fact they’ve risen even more sharply than crude oil prices. Refined products are, broadly speaking, road fuels and aviation fuels. It’s important to note that the Middle East and Asia account for around half of global refining capacity, and that these two production hubs supply not only Asia but also, to a large extent, Europe. Therefore, in terms of pricing, we’ve seen that the average price of refined products on the Asian market has doubled, with an increase of around 50 percent in both US and Europe.

Furthermore, a few remarks can be made about naphtha. Naphtha is an essential component for much of the petrochemical industry and also for the plastics industry. What we have seen is that, despite a decline in demand and a reduction in stocks in Asia, naphtha prices on the Asian market have also doubled.

0:08:31 – Emmanuel Laborde

Everything you’re describing here relates to oil. My question encompassed energy sources, including gas as well. Are we seeing exactly the same trend in that sector?

0:08:39 – Pascal Devaux

Yes, well, it’s a bit different – naturally, the markets vary – but we’ve also seen a sharp rise in gas prices. Since the start of the year, the price of gas on the European market has risen by around 30 percent. That’s still nowhere near what we saw during the 2022 energy crisis, when prices doubled over a much longer period. We have therefore been relatively less affected than during the 2022 crisis because Europe is less dependent on gas imports from the Middle East.

We import less than 10 percent of our gas needs from the Middle East. Another factor that may have worked in our favour – or rather, did work in our favour – is that this crisis occurred at a time of relatively low demand; it happened just after winter, when gas consumption is slightly lower.

Furthermore, on the Asian market, there has also been a decline in LNG imports. This is partly due to the fact that there were relatively high level of LNG stocks in Asia, even though it is not as easy to store as oil. Secondly, in some countries there has been a shift towards alternative energy sources, particularly in the electricity mix, leading to an increase reliance on coal in certain Asian countries.

0:09:56 – Emmanuel Laborde

Let me remind you once again, we are broadcasting live this Tuesday afternoon, 16 June. If you’re watching us during the repeat broadcast, this will help you date our comments. We are in the run-up to Friday, when the peace treaty is due to be signed. We’re going to engage in a challenging economic exercise: forecasting. Let’s imagine that the situation improves sustainably, and the Strait of Hormuz is reopened. What can we expect in the short term? What will be the impact on energy prices as early as this summer?

0:10:24 – Pascal Devaux

Making forecasts is an exceptionally challenging task, especially in tense situations and in such volatile markets. Nevertheless, we can assert that even if the Strait of Hormuz reopens in the coming weeks, we anticipate that oil prices will remain elevated. This is partly due to the time it will take to bring all the facilities in the Middle East back into production. The timeline for this restoration can vary significantly, taking a few weeks in some countries like Saudi Arabia, while in Iraq, it may extend to several months due to the longer process of restarting oil production facilities.

That is one contributing factor. Another important aspect is that, once the Strait reopens, global demand will remain strong,

particularly as consumer countries will need to replenish their reserves.

Current stock levels are extremely low – at an all-time low – so this restocking demand will push prices up. Furthermore, although we are at the start of a process, having just extended a ceasefire and preparing to address some difficult issues, we can assume that geopolitical tensions in the region will remain fairly high. This geopolitical factor will further contribute to rising prices, leading us to expect prices to remain in the region of \$80 a barrel.

0:11:49 – Emmanuel Laborde

In other words, there's a psychological factor at play that goes beyond mere production capacity. – Yes, exactly. – Quite right. This is a bit of a trick question, but it'll be the last one. How might we return to, and when might we return to, the price levels seen at the start of 2026?

0:12:02 - Pascal Devaux

– Well, I don't have a clear answer to that, but it's linked to... It's linked to so many factors that we can't answer that. Nevertheless, one key factor we've just mentioned is the geopolitical situation. If we assume that geopolitical tensions in the region continue to ease, we can envisage a return to previous price levels – pre-war prices in Iran – starting from the second half of 2027 onwards.

0:12:32 – Emmanuel Laborde

Thank you for your frankness in that answer. So the agreement that's been signed should somewhat alleviate geopolitical concerns in the region – we all hope so, at any rate. Even so, we can expect – and bear with me here, as I'm about to use some rather complex terminology – the potential for stagflation or even a recession. Guillaume, I can see you nodding. In advanced economies where structural growth is, in fact, rather weak, do you foresee this type of scenario in your economic research?

0:12:57 – Guillaume Derrien That wasn't part of our baseline scenario and the likelihood of an agreement being signed and the easing of tensions between Iran and the United States reinforce this view. To give a few figures, in the US, we expect growth to remain robust at over 2 percent in 2026-2027, although inflationary pressures are expected to increase, and not just because of energy. Inflation in the US exceeded the 4 percent mark in May. However, we have made fairly significant downward revisions to our growth forecasts for the Eurozone, with an anticipated growth rate of 0.6 percent in 2026, down from the previous estimate of 1.6 percent.

As for Eurozone inflation, we predict it will reach 3 percent – slightly higher – in 2027, because, as Pascal rightly pointed out, we expect energy prices to remain at a high plateau next year.

Furthermore, the underlying message may be that this conflict in the Middle East is undermining the recovery we had anticipated, but it does not entirely negate it. We believe that there are still significant structural supports in place in 2026 that will extend into 2027. Investment cycles, in particular, remain on a positive trajectory. This obviously includes AI and digital investments in the United States. In Europe, we also have rearmament initiatives and support linked to the electrification programme, which is gaining momentum.

0:14:15 – Emmanuel Laborde

These are colossal projects, particularly the AI initiative, which is set to attract substantial investments and, we hope, stimulate growth. We'll discuss that topic in the second segment. Another point to bear in mind, perhaps, is that, although it may seem a long time ago, the economic situation in early 2026 was actually rather good, and we can envision that this trend will continue.

0:14:35 – Guillaume Derrien

Yes, we mustn't forget the starting point. The global economy was on a solid footing before the outbreak of the conflict in Iran. As we've said, growth in the United States remained robust in 2025, which continued into the first quarter of 2026. In the Eurozone too, growth was on a more gradual recovery path than in the US. Furthermore, if we look specifically at the labour markets, they have remained – and continue to remain – very tight on both sides of the Atlantic. Thus, the current situation is one of resilience.

0:15:02 – Emmanuel Laborde

What's the key takeaway here? Is there ultimately little or no risk of a recession?

0:15:05 - Guillaume Derrien

To fall into recession, the shock would need to intensify and spread, leading to potential shortages in energy and, consequently, in industrial inputs, particularly in the chemicals sector and for semiconductors. While this scenario cannot be entirely ruled out at this stage, the prospect of the Strait of Hormuz reopening does help to mitigate these concerns somewhat.

0:15:29 – Emmanuel Laborde

The Strait was closed on 13 April, which was just over two months ago. Even if it reopens, the repercussions are still being felt; we know that there is a delay in economic models. What economic consequences can we already observe in emerging economies?

0:15:42 - Pascal Devaux

Well, regarding emerging economies, starting with inflation, we've seen a rapid yet relatively contained effect on average inflation across these markets, with a year-on-year rate of 4.5 percent in February, rising to an average of 6 percent in April. This is significant, but not excessively high. In terms of growth, we've seen downward revisions to growth forecasts, but these revisions are moderate for both 2026 and 2027.

Against this backdrop of inflationary pressure and growth holding steady at a satisfactory level, central banks in emerging markets have, on average, put their monetary easing policies on hold for the time being.

If we take a step back, we can also see that the revisions to growth and inflation forecasts have been more significant for advanced economies than for developing ones. Of course, this is excluding the Gulf states, which have been severely affected in terms of growth. Furthermore, another point worth highlighting is that, in terms of macroeconomic fundamentals, the disparity between advanced economies and the most developed emerging economies is narrowing; this is indeed a noteworthy development.

If we look at the situation in a little more detail, specifically within the emerging world, it is clear that Asian countries have been the hardest hit, given that they are the most dependent on hydrocarbon imports from the Middle East.

As a result, many Asian countries have experienced sharp spikes in inflation, fuelled by substantial currency depreciation. A few words on Türkiye, which is always an interesting country to watch, particularly in times of crisis. In Türkiye, we continue to see a persistently high inflationary environment. There has also been a notable depreciation of the currency, which has been more severe than the average currency depreciation seen in other emerging markets.

Another point worth highlighting is the sharp rise in yields on sovereign bonds within the Turkish market.

0:17:56 – Emmanuel Laborde

In times of heightened tension, such as those we have just experienced, we tend to look back, at least over the medium term, for examples that might provide reassurance and additional indicators. If we look back to 2022, the responses from central banks were remarkably aggressive, with rates being increased by 400 basis points. Is this a scenario we might see again?

0:18:19 – Guillaume Derrien

Well, as for rate rises, yes, we do expect them. In fact, some central banks have already started to raise rates gradually. However, we do not foresee anything on the same scale as what we saw in 2022. The main reason for this is that the anticipated level of inflation for this year is expected to remain much lower than in 2022. We must remember that in 2022, the energy shock occurred in an overheated economy characterised by very strong demand due to the recovery and reopening of the global economy following the Covid pandemic.

Inflationary pressures had already started to materialise even before the outbreak of the conflict in Ukraine. In that context, companies were better able to pass on their rising costs to selling prices. We were also seeing wages pressures begin to intensify. Today, however, we find ourselves in a rather different situation.

In 2022, everything was essentially coming together. It is important to note that inflation in the Eurozone, in particular, exceeded the 10 percent threshold in the autumn of 2022.

0:19:13 – Emmanuel Laborde

It was monumental. We'd almost forgotten, but that figure was truly staggering. So, basically, we're not in the same situation at all.

0:19:18 – Guillaume Derrien

Yes, as I said, supply-side pressures are not as intense. Demand is contributing less to inflation, and given that wage growth is subject to a certain degree of inertia, particularly in the Eurozone, we expect them to moderate and remain at a stable growth rate in 2026. Moreover, when one reads or listens to central bankers, particularly those at the ECB, of the concern regarding a wage-price spiral is now mentioned less frequently, in contrast to the extensive focus it received in 2022.

Currently, this risk is not as urgent, and central bankers are placing less emphasis on it.

0:19:58 – Emmanuel Labrode

Having mentioned the ECB, let's continue with that topic for the moment. As we reach mid-June, there have already been some responses. What can we expect? What has been the reaction so far, and what can we expect next from the other central banks?

0:20:08 - Guillaume Derrien

The ECB raised its policy rates by 25 basis points last week. Another 25-basis-point rise is expected, probably in September. As for the Fed, that is where the revisions were most significant. We now expect three consecutive rate hikes starting in December. Growth in the United States and the labour market remains strong. Inflationary pressures remain high, with the inflation rate currently at 4 percent.

Thus, against this backdrop, it can still be asserted that the existing real interest rates remain accommodative – and likely much more so than the US Federal Reserve had anticipated when they cut rates last year.

Emmanuel Laborde

One final point regarding the Bank of Japan?

Guillaume Derrien

Yes, well, the Bank of Japan is following a slightly different path – one of monetary policy normalisation after years of low interest rates.

It raised its rates this morning; we still believe it will adhere to a very gradual approach to monetary tightening, but at a level that remains quite accommodative today compared with other central banks.

0:21:07 - Emmanuel Laborde

However, once again, the Japanese economy operates in a unique context, with a monetary policy that is distinct from the rest of the world. We'll be taking your questions in a few moments; please feel free to send them to the moderator – we'll be happy to receive them in three minutes' time. As you are aware, we do our utmost in this half-yearly session to draw on a wide range of sources for our information, aiming for objectivity while also incorporating a sense of positivity. We strive to achieve this every time, regardless of the topics discussed. In this particular case, what opportunities might be arising? What positive developments can we expect, particularly for Europe, Pascal?

0:21:39 - Pascal Devaux

Yes, so one of the positive developments we can expect is, in particular, what we already saw in 2022: a focus on energy security. As a result, European countries, aiming to reduce their energy vulnerability, will seek to diversify their supply sources, despite the acknowledged limitations in diversification options, particularly in the hydrocarbon markets. Additionally, a significant factor in mitigating this vulnerability is an increase in storage capacity for all oil and gas products.

Another factor, which is perhaps a little more positive – at least from my point of view – is that this energy crisis, being the second of its kind in four years, could serve as a catalyst or wake-up call for European governments, potentially expediting the transition to low-carbon energy. This acceleration of the low-carbon transition could be facilitated, in particular, by production capacities in key segments of the transition in China, along with substantial stockpiles there, which could lead to decreasing prices that would further facilitate this transition. One example of this trend is the sharp fall in battery prices we have been

seeing for some time, affecting both stationary batteries and vehicle batteries.

And we know that batteries are a key element of the low-carbon transition.

0:23:10 – Emmanuel Laborde

Just before we take your questions, the same question for you, Isabelle: is there a glimmer of optimism in anything we've just discussed?

0:23:15 - Isabelle Mateos y Lago

Yes, absolutely, particularly with regard to Europe. I'd like to add to what Guillaume was saying earlier: a major difference compared to 2022 is that, at that time, the ECB was just emerging from several years of negative interest rates and was buying massive quantities of government bonds every month. Why? Because there was such a chronic shortfall in domestic demand that had to be offset. That is no longer the case at all. The initial rate was 2 percent, and we are now at 2.25 percent, which remains within the neutral rate range.

Furthermore, the ECB is in the process of reducing its balance sheet; it is no longer buying any sovereign bonds at all. But beyond that, I see five more fundamental reasons, on which I have, incidentally, recently published a short editorial – which I am now shamelessly promoting – and which will be posted on the conference website.

0:24:09 – Emmanuel Laborde

We'll include a link to it, yes.

0:24:10 - Isabelle Mateos y Lago

The first reason pertains to European industry. Every day we see alarmist headlines proclaiming the demise of European industry. However, such claims are exaggerated. What is undeniable is that European industry is undergoing a transformation. This transformation entails both destruction and creation. Nevertheless, Europe continues to be a net exporter of manufactured goods on a global scale. The second aspect pertains to services. By contrast, nobody ever talks about this. Europe is a superpower when it comes to exporting services, ranking first globally, far ahead of the United States, which holds the second position.

This focus is particularly on services that offer higher added value.

Thirdly, tech. I don't want to say too much about this as we'll be discussing it in the upcoming panel. but we're talking during VivaTech week. Admittedly, the tech sector in Europe, while not yet on par with that in the United States, is making considerable efforts to bridge the gap.

Fourthly, we are witnessing a genuine political shift in the way economic policies are formulated in Europe. It appears while the Draghi report failed to galvanise European policymakers into action, the combined shocks of the invasion of Ukraine, Liberation Day, and threats to Greenland, finally prompted European leaders to recognise the urgent need to boost growth and strengthen our strategic autonomy, backed by robust industrial policies.

We're only at the very beginning; we can't see the effects yet, but I'm convinced that within the next five years, we'll see a tangible impact. Fifth and final point: the geopolitical landscape, which has been unfavourable in recent years, is starting to shift in the right direction. There was a significant political shake-up in Hungary a few months ago and we're starting to see faint indications that the war in Ukraine may be nearing its conclusion. It is now 2026, ten years after Brexit. There has been a complete shift in opinion in the United Kingdom, with a large majority of Britons now considering that leaving the European Union was a mistake and wanting a closer relationship. More generally, Europe – once again under pressure from current events is actively engaged in forging new partnerships with the Gulf states, India and Mercosur. While these initiatives have commercial implications, they are primarily driven by geopolitical considerations. I think all this will give Europe a real boost over the coming years.

0:27:01 – Emmanuel Laborde

We'll now take your questions, if the production team can bring them up for us. We'll address them in the order they are presented. Wasn't it a mistake for the ECB to have raised these rates, especially when the Fed and the Bank of England did nothing of the sort? Now, when it comes to central banks, I know, Isabelle, that this is a subject on which you could talk for hours.

0:27:21 - Isabelle Mateos y Lago

Yes, right, I'll take this one, with guidance from Guillaume. I understand this is a prevalent opinion and a question I'm often asked. Personally, I don't share this view. Firstly, the ECB's interest rate before the increase was 2 percent. In contrast, the Fed's rate stands at 3.5 to 3.75 and the Bank of England's at 3.75. So we can already see that we're starting from distinctly different positions. Furthermore, in the macroeconomic projections presented by the ECB last week at the Monetary Policy Council meeting, which included a whole range of scenarios, in every single scenario, inflation is projected to exceed 3 percent this year and is not expected to return to its target until the second half of next year.

Moreover, between two and three rate increases are implicitly factored in. Therefore, in all scenarios, implementing this rate increase last week seemed perfectly reasonable; moreover, across all scenarios – not only those of the ECB but also aligns closely with our own assessments – the impact on growth is minimal. From my point of view, the mistake would have been to refrain from implementing this rate increase, which could have destabilised the markets and led to an even greater rise in bond yields – yields that have already risen by several tens of basis points since the start of the conflict, posing a significant challenge for heavily indebted sovereigns who must consequently pay more to service their debts.

So, as far as I'm concerned, there's no question about it: it wasn't a mistake.

0:29:03 – Emmanuel Laborde

Guillaume, my second question: is this energy crisis likely to undermine the competitiveness of European businesses, particularly in relation to China?

0:29:11 – Guillaume Derrien

Well, that's a good question, Emmanuel. I'll answer in two parts. Firstly, I must say that the rise in energy costs will indeed continue to weaken certain sectors of industry that were already grappling with structural difficulties due to Chinese overcapacity. These include, in particular, energy-intensive industries such as chemicals, plastics manufacturing and metallurgy. However, it's particularly important to consider the comparison with 2022. Today, we're facing a shock that is fundamentally different in nature.

In 2022, the shock was largely confined to Europe, characterised in particular by a spike in gas prices that we are not seeing today. Today, the shock is global, and from this perspective, China is not immune to rising energy costs. In fact, we are seeing an increase in inflation and producer prices in China.

For Europe, the challenge extends beyond energy prices; it is quite simply a question of structural competitiveness. As Isabelle pointed out, numerous industries in Europe remain competitive. Notably, the pharmaceutical and aerospace sectors, particularly in France, are performing well. Therefore, the primary concern for Europe regarding China transcends mere cost competitiveness; it encompasses structural competitiveness that prioritises innovation above all else.

0:30:34 – Emmanuel Laborde

Right, let's take a minute. I don't know if you can see it on your screen, but I've got it on my iPad – it's for you, Pascal. Let us revisit our earlier discussion on prices. Can oil prices return to their pre-crisis level, i.e. around \$65?

0:30:47 - Pascal Devaux

Yes, well, certainly not in the short term. However, it might be conceivable from the second half of 2027 onwards. If we recall the points we made earlier, several factors will contribute to sustained price increases in the short term: the ongoing geopolitical risks in the region and the necessity for most countries, particularly those in the OECD, to replenish their reserves. This is also a factor in keeping prices high.

Additionally, a short term factor includes the time it will take for all the ships currently blocked to the west of the Strait to pass through it, as well as the time needed to bring all the production platforms in the Gulf back online. This process could take anywhere from several weeks to several months. Thus, the prospect of \$65 a barrel is not imminent, at least not by the end of the year.

To give a full answer, there is indeed a great deal of inertia.

0:31:40 – Emmanuel Laborde

Thank you very much to both of you. We're now going to move on to the second topic: artificial intelligence, which is completely transforming our professional and personal lives. We'll be dedicating a whole segment to exploring its consequences and economic implications. Let's get started – please hold on for a moment while we play a jingle.

0:32:01 -

0:32:07 - Emmanuel Laborde

Make yourselves comfortable. Yes, we're having a glass of water, but it must be about 28 degrees on set, and you'll understand that we need to stay hydrated on this lovely, almost summery day. Artificial intelligence – Isabelle, could you give us a bit of background to start with? It's a subject where, the more you dig into it, the more you realise that the changes are going to be profound and significant. You also realise that they might be difficult to pin down. Is that a fair way to describe it? The only thing that's certain is that the changes are here, and many more are on the horizon.

0:32:41 – Isabelle Mateos y Lago

Well, I believe that, for the most part, the significant changes haven't actually happened yet. What we've seen is really just the very beginning. I think we should expect fundamental changes in how we produce, consume, entertain ourselves and teach. No sector of the economy – or even the way we are governed – will be spared. But I believe that when we consider the economic impact – and, indeed, much as with all previous technological revolutions – it is important to distinguish between three phases.

First, there is a phase of infrastructure development. In this context, this refers to data centres and fibre-optic networks suited to the age of artificial intelligence. Then there is a phase of adoption, meaning roll-out across the entire economy.

And then there is the new steady state, once everything is in place. Achieving this new steady state may take up to two decades. For the moment, we are really only at the very beginning. While I believe we are starting to get a handle on certain aspects, we mustn't overestimate our ability to predict the future.

0:33:50 – Emmanuel Laborde

Once again, the best is yet to come. This second presentation is entitled 'A Transformative Shock: Artificial Intelligence, Mining, Chips and the Entrepreneur'. We're going to cover all areas of activity, from minerals and the construction of those famous data centres to the changes in our lives as entrepreneurs or intrapreneurs – changes that are already quite significant. Stéphane, let's start with you, if you don't mind. We'll take the emergence of generative AI as our starting point. Although artificial intelligence has existed in laboratories for a very long time, its widespread adoption, its arrival, and the initial disruption it caused in our professional lives can be traced back to the launch of ChatGPT in November 2022.

What can we say about it today, three and a half years after it burst onto the scene in our professional lives?

0:34:37 – Stéphane Colliac

First of all, we can say that artificial intelligence represents a wave of innovation. This wave of innovation will have an impact in terms of inflation, productivity and the labour market. Additionally, it fosters an increase in business creations. Entrepreneurs are developing new solutions that will eventually be incorporated into the economy. This rise in business creations is particularly noticeable in the United States and Europe, where we have seen a 10 percent year-on-year increase in business creations since the start of the year in both regions.

Naturally, this raises questions, which we'll address – particularly regarding productivity, what we can expect in this area, and the relationship between artificial intelligence and the labor market.

0:35:13 – Emmanuel Laborde

Productivity is a term that will come up very often in this presentation. To begin with, let's look at the foundations of AI: the hardware. We need to build these data processing facilities known as data centres. There can be no AI without semiconductors, and no semiconductors without the critical metals they contain. This situation already presents significant initial implications. From an economic point of view, is this the starting point, Christine?

0:35:36 – Christine Peltier

Yes, exactly. You've just identified the main channel through which the rise of AI is driving growth in emerging economies: supply chains. Some emerging economies are very well positioned within these AI supply chains; these are the producers of critical metals, semiconductors and other technological goods. These countries have fully capitalised on – and continue to reap the benefits of – the boom in investment in physical AI infrastructure.

0:36:06 – Emmanuel Laborde

Does that mean that AI-related trade has, in fact, bolstered global trade more generally? Let's not forget that in early 2025, President Trump took office, leading to a wave of protectionist tariffs that raised widespread concern and restricted global trade.

0:36:25 – Christine Peltier

Indeed, the demand for AI-enabling goods is a major driver of the recovery in global trade in 2025 and 2026. Growth in total goods exports reached 6.8 percent in 2025. Growth in exports of AI-enabling goods was at least double that rate, and this growth is expected to strengthen further in 2026. It is currently estimated that AI-related goods account for around 15 percent of total global merchandise exports.

0:36:59 – Emmanuel Laborde

That's absolutely huge. Who is currently benefiting from this boom? Which countries are faring best?

0:37:05 – Christine Peltier

When it comes to semiconductors, Asia is the undisputed leader. Asia accounts for around 65 percent of exports of AI-enabling goods and up to 85 percent of semiconductors. As we know, the most sophisticated chips come from Taiwan. Taiwanese exports rose by 24% in 2025 and by as much as 40% over the last three months compared with the same period in 2025. South Korea and China are also benefiting enormously from the rising demand for AI-related goods. Countries such as Vietnam, Malaysia and Singapore are also strategically positioned, albeit slightly further down the value chains.

0:37:45 – Emmanuel Laborde

There is also an effect that should not be underestimated: the wealth effect generated from the fast increase in the share prices of certain tech stocks related to AI.

0:37:55 – Christine Peltier

Yes, indeed. The spike in stock prices in certain countries, along with the resulting wealth effect, has supported domestic demand. For example, the benchmark indices of the Taipei and Seoul stock exchanges have doubled over the past year, which is undoubtedly positive for growth.

0:38:12 – Emmanuel Laborde

I'm going to simplify things a little. Can we assert that everything is going well in these countries thanks to AI? Are they the first to benefit from it?

0:38:19 – Christine Peltier

Well, there's always room for nuance. The exceptional performance of AI-related sectors may mask the more mediocre performance, in some countries, of sectors that depend on domestic demand, those that are more affected by the energy crisis, or sectors directly affected by Chinese competition.

0:38:41 – Emmanuel Laborde

We have expressed interest in all sectors influenced by AI. Could you provide some insights on critical metals. They're relatively hard to come by on the planet. Who stands to benefit?

0:38:53 – Christine Peltier

For producers of critical metals, the first thing to note is that they are rather concentrated, like chip manufacturers. For example, lithium and copper are predominantly sourced from Latin America, cobalt from the Democratic Republic of Congo, and nickel from Indonesia. Furthermore, it can be stated that the production of these critical metals, along with the increasing demand associated with the AI boom, have a rather limited impact – a rather limited direct impact – on the economic growth of the producing countries.

Emmanuel Laborde

Why is that?

Christine Peltier

Because, on the one hand, producing countries export these critical metals in their raw state, and secondly, because the quantities required are very small. Overall, raw materials account for around 3 percent of total exports of AI-related goods, so the volumes are fairly small.

0:39:47 – Emmanuel Laborde

Now, let's shift our focus to the United States, where talk of investments and new solutions are a daily occurrence in the news. We're constantly bombarded with this information, sometimes accompanied by staggering figures. The measurements are in billions or tens of billions. We're not used to sums like that, whatever type of economy we're talking about. Stéphane, is the development of AI really as rapid as it seems in the United States?

0:40:12 – Stéphane Colliac

Well, at the very least, it's fast. Is it as fast as it seems, given the sums being bandied about? It is fast. Several studies have tried to estimate the size of the artificial intelligence sector in the United States, including one by Korinek and McKelvey, which suggests that this sector is roughly the same size as the entire US air transport industry, which we know is highly developed. That amounts to around 250 billion dollars, which is not far off one percentage point of GDP, and all this growth has taken place in just three years.

We need to put this into perspective. This means annual growth of 140% in this sector by 2024-2025. This growth has been a crucial factor that has enabled US growth to remain above 2% over the past three years, despite the slowdown in previous growth drivers.

Emmanuel Laborde

So, very good figures and a very positive trend in the United States.

0:40:58 – Emmanuel Laborde

How are things going in Europe?

0:41:00 – Stéphane Colliac

There is a lag, it's true. We cannot deny that. However, the region has potential and inherent strengths. We have already paid attention to the semiconductor manufacturers. Notably, ASML, the company that builds the machines used to manufacture semiconductors, is a key part of Europe's strength. Several countries are at the forefront in terms of investment, particularly the Scandinavian countries, which invest around 7 percent of their GDP in intellectual property products, matching the investment levels of the United States.

The problem we face is that the larger countries are investing slightly less. Consequently, we are falling behind in the production and in the development of artificial intelligence. Fortunately, we have a growing number of projects to build data centres, which should help to make up some of this ground, notably the 93 billion euros announced at the Choose France event.

However, the lag in terms of computing and programming capacities will need to be addressed in the future.

0:41:57 – Emmanuel Laborde

93 billion – that was at the third Choose France event, wasn't it? – The very latest one. – And that was more than the previous two combined – significantly more, in fact. I'm going to be a bit of a stickler here, though: we do hear a lot of people talking about Europe's gap being unbridgeable – is that an exaggeration, or is it a genuine concern?

0:42:15 – Stéphane Colliac

Well, 'unbridgeable' – not necessarily. You have to understand that there are two issues here. There's AI production, and then there's AI use cases. And it's AI adoption that drives productivity. In this regard – I'll start with that – Europe is every bit as good as other regions. When it comes to use cases – the application of AI across various surveys – we're roughly on a par with, or even ahead of, other major geographical regions. On the other hand, it's true that we're lagging behind in terms of production.

However, it is worth noting that the tech sector is growing, just as in other regions. It has risen from 4% to 15% of GDP over the last ten years. Jobs creation was high in the sector, in the same way as business creations – as I mentioned at the very beginning. 1.6 million jobs have been created in the European Union since 2020.

Electricity is largely decarbonised, with 71 percent sourced from renewables and nuclear power. So there are many strengths. We could take inspiration from Arthur Mensch [CEO of Mistral AI], who tells us that we will need to convert these electrons into intelligence.

Emmanuel Laborde

A truly wonderful phrase that we love to repeat here whenever we talk about artificial intelligence.

0:43:20 – Emmanuel Laborde

We're talking about productivity, which is very important. Those words were part of the introduction to your speech. We have also examined the fact that China is banking on AI to significantly boost its productivity. That's one of the key points.

0:43:35 - Christine Peltier

Yes, indeed. China is investing heavily in AI. This effort is aimed not only at reinforcing its technological dominance and competing with the United States, but also at boosting productivity gains. Beijing aims to double per capita GDP between 2020 and 2035. This is, in fact, an ambitious target given the structural challenges that are slowing economic growth in China. Therefore, this target can only be achieved through significant productivity gains. This is where innovation and AI come into their own. Beijing is really banking on widespread, rapid deployment across all sectors of the economy and nationwide to drive these productivity gains.

0:44:16 – Emmanuel Laborde

Still on the subject of productivity, but let's turn our attention back to the United States. Is AI genuinely the catalyst for this productivity growth, which has notably outpaced other regions of the world since the post-Covid period?

0:44:28 – Stéphane Colliac

To put it simply, one could say no. And we wouldn't be far off the mark, because hourly labour productivity in the US has been rising by 2.4 percent a year since 2023. That's roughly one percentage point higher than the annual productivity gains seen before the Covid-19 pandemic. Furthermore, it's closely linked to the digital investments made prior to the advent of AI. This trend is ongoing. There were technological innovations even before AI. The acceleration in productivity in the United States can largely be attributed to the synergy between these digital innovations and changes in the labor market – such as increased remote work, more self-employment, and therefore, the ability to work more efficiently with digital tools.

Emmanuel Laborde

So, in your opinion, there won't be any impact on output linked to AI in the United States,?

Stéphane Colliac

Yes, there will be an impact, but it is yet to come, as Isabelle said in her introduction.

Currently, we're developing AI, yet its application remains limited. The true impact on productivity will emerge through its utilisation. However, we should not overestimate the expected growth in productivity. The figures involved are significant here too. A study conducted by MIT examined the role of a coder. We've heard that there could be a fairly significant substitution between coding and artificial intelligence.

Emmanuel Laborde

Computer programming.

Stéphane Colliac

Computer programming, exactly.

Thank you, you're right to point that out. In the straightforward task of coding – that is, writing code – we could increase productivity by 300 percent by using artificial intelligence. However, does this encompass the entirety of a coder's job? No, because a coder must also ensure that the code is ready for production – in other words, that it's efficient and can be used.

They also have to, in a way, explain these solutions them and liaise with other teams, so that they're used by people who don't write code. So there's a whole range of tasks involved in a coder's job, not just coding. When you factor all that in, the actual productivity gain is just 30 percent. While 30% is still substantial, it's just 30% – it's not 300%.

0:46:31 – Emmanuel Laborde

– Yes, we need to be careful about the marketing that can be done with certain isolated figures and make sure we always consider them in their entirety. We're listening to you very carefully and we can see that, as Isabelle said, this is going to change a lot of things. We'll be taking your questions on this in a few minutes' time, by the way. Isabelle, we're about to enter a phase of substantial growth, and it is fair to say that it's going to be good for our economies, but will it be enough to sort out public finances, which sometimes need improving?

0:47:01 – Isabelle Mateos y Lago

I admire your optimism about the considerable growth that lies ahead, although I'm not sure I'd phrase it in exactly the same way. Clearly, there is a scenario – indeed, there are scenarios produced by virtually all fiscal oversight watchdogs in advanced economies – in which, thanks to artificial intelligence, we could achieve productivity gains of, say, an additional 0.5 percentage points per year. That's a lot, but it's attainable. In such a scenario, instead of aid-to-GDP ratios rising from 100 to 140 percent over the next 20 years, they would only rise from 100 to 110 percent – which, while not ideal, is certainly an improvement.

That said, I believe it would be completely unwise to count on this, as achieving these productivity gains requires more than just the widespread adoption of ChatGPT or any similar technology.

We really need to transform processes across the entire economy in order to optimise the use of AI. I'm confident that this will happen over time. However, while it will no doubt happen over the next 20 years, I think we should remain cautious over the next five years.

0:48:17 – Emmanuel Laborde

We're now going to move on to the pressing issue at hand. AI versus jobs – what should we anticipate in this regard? Would you like to put that into context a little first?

0:48:29 – Isabelle Mateos y Lago

Yes, well, this is a question that arises every time there's a technological revolution – even with the introduction of the spinning jenny. When you look at the figures, the jobs created by these new technologies have consistently outweighed the jobs lost. Why? Because these innovations enable the economy as a whole to grow, to stimulate demand, and so on. So I'd say that, based on historical experience, our initial assumption should be a positive one.

However, history never repeats itself. This particular revolution possesses unique characteristics, notably the speed of its adoption and spread, which could make it more difficult for our economies to manage.

But I'd rather leave it to our experts here to comment on that.

0:49:22 – Emmanuel Laborde

So, to recap, AI versus jobs, Christine, how can we expect that to play out?

0:49:26 – Christine Peltier

A general point to start with: yes, certain sectors will be affected, both in advanced and emerging economies. For the time being, the immediate impact of AI on employment is not clearly visible, but we can anticipate that the development of agent-based AI in the coming years will lead to job losses in certain sectors because it will enable the automation of cognitive and operational tasks. This is a foreseeable outcome.

0:49:53 - Emmanuel Laborde

Are there any examples from emerging economies?

0:49:56 - Christine Peltier

In the emerging world, China is a notable example; the effects of AI and robotisation are starting to raise concerns among the authorities. India is another example, as it has relied on the development of IT services focused on automated tasks and intermediate-level skills. Consequently, India's competitive advantage could erode rapidly. In fact, we are already seeing a slowdown in job creation within the IT services sector.

0:50:26 – Emmanuel Laborde

The first signs are already present. The same question, but this time regarding advanced economies.

Stéphane, how do we see the impact of AI on employment?

Stéphane Colliac

It is a kind of race between the rapid development of artificial intelligence and, consequently, the number of tasks to be carried out; and then there is a substitution effect that may occur between artificial intelligence and some of the tasks that employees have to carry out. Therefore, if the number of tasks to be carried out increases faster than the tasks that can be replaced by AI – what we might call the Jevons effect, which means that 'additional activity' is the main phenomenon – then AI does not have a negative impact on employment levels, because we need more workers to carry out these additional tasks. For example, if we consider the case of a coder, it's noteworthy that, after a few difficult months, we've once again seen more job vacancies for coding positions appear on the well-known website Indeed.

Emmanuel Laborde

So there's cause for optimism in this regard.

0:51:24 - Emmanuel Laborde

You mentioned AI 'predation' on jobs – a term that is occasionally used by certain economists.

0:51:30 - Stéphane Colliac

Indeed, there's another factor to bear in mind too – it's a question of cost at the moment. We're seeing a transition that could once again favour human labour, particularly if the cost of AI rises. We've seen a rise in the cost of tokens in the United States. That's true. So we need to be cautious as this situation can change very, very quickly. There's also competition within the AI sector. There's Chinese competition too, which could have an impact. However, if AI becomes expensive, labour may be preferred because its cost is much more stable.

That's an important point. But above all, the answer is a nuanced one.

What we need to bear in mind is that AI replaces tasks rather than jobs. This is a crucial distinction. While some people have expressed concerns about jobs destruction, it is actually certain tasks within those jobs that are at risk of being replaced. That much is obvious. But the entire job itself is not necessarily at risk.

On the contrary, by using AI for certain tasks to boost productivity, we can have an 'augmented' employee who demonstrates increased productivity compared to a competitor who does not use AI. The economies that stand to benefit from this would primarily include the United States, where approximately one quarter of jobs may be prone to this transition. While some may argue that these jobs are under threat, let's take a more positive view. For example, one-sixth of jobs in France and one-tenth of jobs in Italy may also be affected.

0:52:52 – Emmanuel Laborde

We'll be taking your questions in a few moments. Please feel free to submit them now on this wide-ranging topic. Innovation frequently helps to bring prices down. Is this also true for artificial intelligence today, Christine?

0:53:09 – Christine Peltier

I'll answer by talking about the resources required for AI. At the moment, the boom in AI and the construction of data centres are leading to a sharp rise in demand for the resources they require. This surge in demand is both significant and rapid, leading to a rapid increase in prices. For example, the cost of copper has risen by 40 percent over the past year and has remained at historically high levels since the start of the year. This price rise is linked to a massive demand shock driven by both AI and electrification, coupled with an increase in supply that is simply not keeping up with the rise in demand.

0:53:49 - Emmanuel Laborde

Has there also been a rise in the price of microchips? It is becoming increasingly difficult to upgrade one's computer these days.

0:53:54 - Christine Peltier

Indeed, the cost of chips has skyrocketed over the past year. For instance, the unit price of semiconductors exported from South Korea has increased 2.5-fold in a year. Consequently, this increase in chip and critical metal prices is improving the terms of trade for exporting countries, yet it may also fuel inflationary pressures in sectors that use the same resources as AI.

0:54:21 - Emmanuel Laborde

So, Stéphane, does AI actually drive prices up or down?

0:54:25 - Stéphane Colliac

Well, if we go back to the idea that AI is an innovation, it is generally observed that innovation tends to bring prices down. Therefore, in the long run, AI should bring prices down. In the digital sector in which AI operates, for example, in France, we've seen a 6 percent decrease in prices over 10 years. Conversely, in other sectors, we've seen a 20 percent increase in prices over 10 years. Now, the question is whether we might see a different trend in the short term.

The rapid development of AI is depleting the resources required for its operation, as both Christine and Isabelle mentioned, which could lead to a slightly heightened inflationary impact in the short term. In this regard, I'd like to highlight one point: the vital importance of access to electricity. AI requires a great deal of electricity, and we can see that in the United States, electricity prices have changed quite significantly from pre-Covid levels, now standing nearly 30 percent higher than the previous trend.

0:55:21 - Emmanuel Laborde

This is going to be highly inflationary, and historically, the US has faced numerous energy challenges. Isn't there also the issue of a business model that's evolving at an exceptionally rapid pace?

0:55:29 - Stéphane Colliac

Yes, the business model is a key issue, which leads on to what I know you are about to wrap up, Isabelle. I'll refer back to the study by Korinek and McKelvey to begin with, which, assuming technology remains constant, looks at the extent to which the price of AI has fallen: 94 percent in three years. One might be tempted to assert that the technology from three years ago is already largely obsolete. This is certainly true. The primary concern is to ensure a return on investment for companies investing in this sector.

Investing in this sector is very expensive. Therefore, if you increase the ROI of your AI, you improve your profit and loss figures and attract more capital. This, in turn, secures the necessary funding for your next investment cycle.

Consequently, there may be a correlation between short-term inflationary consequences and the anticipated shift towards attracting capital to the markets.

0:56:26 – Emmanuel Laborde

We'll take your questions in exactly one minute. Just time for a quick summary, Isabelle. We're hearing a lot of optimistic, encouraging things. Could there still be a misstep or a derailment that could prevent the economic promises from being fulfilled, at least from a financial standpoint?

0:56:40 – Isabelle Mateos y Lago

As far as AI is concerned, there are plenty of risks of things going off the rails. However, focusing on the markets, I would like to highlight a few points. Firstly, we've encountered similar situations in the past, and in a way, this is characteristic of how technological revolutions happen. There's a frenzy that draws a lot of capital into the sector, and eventually, the frenzy escalates to the point where we reflect, 'Perhaps this has gone too far'; there's a correction, and then we move on.

To illustrate, looking back at the recent past, five years elapsed between Alan Greenspan, Chairman of the Fed, referring to 'irrational exuberance' regarding the tech and internet sector in the US and the bursting of the dot-com bubble in 2000.

The internet bubble burst, and it caused a bit of a mess at the time. Nevertheless, we are still reaping the benefits today of all the productivity gains associated with this new technology. As for certain companies, Amazon's market capitalisation plummeted by 90 percent that week. If you'd held on to your Amazon shares back then, you'd be very rich today. I'm talking about Amazon, but there are plenty of other examples. I'd say that's more or less how it works. What is certain is that the currently high valuations of all AI-related stocks are based on expectations of meteoric revenue growth.

It is by no means certain that this trend will continue, particularly given growing political resistance.

In the United States, we're witnessing the emergence of powerful citizen movements aimed at restricting the construction of data centres. This situation also exacerbates inequalities within societies. For example, as mentioned earlier regarding South Korea, Samsung recently had to engage in negotiations – so to speak – to resolve a strike, offering bonuses of \$400,000 per employee to achieve a fairer distribution of AI-generated revenues. Additionally, President Trump recently proposed the creation of a sovereign wealth fund that would include stakes in all companies generating this exceptional revenue, so that all Americans can benefit from it – similar to the Alaska oil fund or the arrangements in place in Norway.

There are issues at play; I believe that any potential obstacles will be as much political as they are economic or technological.

0:59:13 – Emmanuel Laborde

In any case, we're hearing that we're entering a new era, and it will be fascinating to experience. We're taking your questions as they come in. Can we interpret the current tensions as a sign of fragmentation within the Western world and a return to power politics, particularly regarding access to strategic resources and innovation? Who'd like to take this one?

0:59:38 – Isabelle Mateos y Lago

Perhaps a word on that: I'm not particularly keen on the term 'fragmentation', but what is certain is that we have spent at least the last 30 years building an extremely integrated and interdependent global economy. However, it is evident that since last year, we have entered a phase where this interdependence is going to be 'weaponised' – I'm not sure how to express this in French, but it is being used as a weapon by certain countries at times... I'll leave it to your imagination to consider which countries might be next. But there you have it: Iran has leveraged this to its advantage in the recent conflict.

Last year, China implemented controls on the export of rare earths and rare-earth magnets. Given the extent of economic interconnection we have achieved, I believe we're going to see repeated shocks of this kind.

Thus, it is not fragmentation, but rather the exploitation of these interdependencies for harmful purposes. This reinforces the need for states and businesses to carefully consider their strategic autonomy and how to minimise their vulnerability to this type of shock.

1:00:46 – Emmanuel Laborde

Another question that also ties in with our first panel discussion. What are the various impacts of the current energy crisis, which

we've mentioned, on semiconductors production in Asia?

1:00:56 – Christine Peltier

I think the question is directed at me. It is true that Asia is the region most directly affected by the energy crisis and is also the major producer of semiconductors. However, since the start of the conflict, the impact of the energy crisis on production activity has been limited. I mentioned the figures for Taiwanese export growth, but the figures are the same in South Korea, for example. On the other hand, rising hydrocarbon prices and concerns about supply chains – including issues related to the availability of helium, for example – have undoubtedly contributed to the rise in chip prices over the past three months.

1:01:44 – Emmanuel Laborde

A question for you, Stéphane. Are there any studies that examine the impact of artificial intelligence on employment, particularly in terms of unemployment rates, access to employment for young graduates, or changes in career opportunities? This question seeks to explore the labour market in greater depth.

1:02:02 – Stéphane Colliac

Yes, there are studies. The problem is that some studies say one thing and others say the opposite. At the moment, it's quite difficult to make sense of it all. However, I'd like to add a point to the discussion to highlight how things are changing in the labour market. As we've said, in the United States, the way people are working is changing. There's an increase in self-employment and working from home. In France, we often refer to this as 'teleworking', especially within a company.

But working from home isn't just about teleworking; self-employment is also on the rise. There are fewer traditional salaried jobs and a growing number of self-employed roles. This trend has been evident in recent years and is even being driven by artificial intelligence. As I mentioned earlier, there's been an increase in business creations.

The increase in business creations indicates that a growing number of self-employed individuals are establishing their operations from home. I think we need to take this into account when we consider the labor market. The balance tips in the right direction when we factor in these elements alongside traditional salaried employment. Among young people, particularly during the Covid pandemic but even before that, there has been a desire to adopt a different behavior – one that does not necessarily follow the traditional path of their fathers, who typically went to work for a company, but rather to work in co-working spaces or alternative environments.

That's where we find ourselves today. These developments are making it easier. It's much easier to set up a business today, particularly with the advent of artificial intelligence.

There are studies that show this. There are many regulatory barriers to setting up a business or engaging in transactions in general. However, the presence of artificial intelligence – or at least models that assist in these endeavours – fosters an appetite for entrepreneurship. Therefore, when it comes to young people, we can also look at it from that angle.

1:03:54 – Emmanuel Laborde

By building their confidence, digital natives will be well-equipped to embrace this new tool. The Gulf states have set ambitious goals in the field of AI. If my memory serves me correctly, these countries have set up a number of data centres within their borders. Will the war alter their plans? Once again, this ties in with the subject we were discussing earlier.

1:04:21 - Christine Peltier

Indeed, the Gulf states have very ambitious plans for AI development. In the short term, one can imagine that these countries will reassess their priorities. It's also likely that private investors will be much more cautious. However, in the medium term, these countries are expected to maintain their plans to boost growth potential and diversify sources of growth. Furthermore, it is likely that they will continue to invest in future-oriented sectors, including AI.

1:04:56 – Emmanuel Laborde

We're running a little over time, but we'll of course answer this final question. No major digital companies emerged in Europe during the internet and mobile revolution, which was, after all, the previous technological revolution. Do you see any signs that artificial intelligence will provide an opportunity for Europe to establish major technology companies?

1:05:14 – Stéphane Colliac

Yes, one could argue that this assertion is not entirely accurate. There are existing companies that have made their mark. I mentioned ASML earlier. This is a company that didn't exist a few decades ago, yet it has expanded, developed solutions that weren't obvious at first, and has become a world leader in the manufacture of machines used to produce semiconductors. We mustn't overlook the fact that there is also an established economy capable of adapting to the new economic landscape. We've seen examples of this, particularly with Valeo, which produces cooling systems.

1:05:46 – Emmanuel Laborde

Which will cool data centres, yes, exactly.

1:05:48 – Stéphane Colliac

Caterpillar is also poised to supply capital goods for use in AI. We're only at the beginning. We don't know which solutions will ultimately prevail. Mistral AI is developing. There are offerings; we've talked a lot about the United States. We've given plenty of examples from the United States. There are also offerings in China in particular that are growing. There are European offerings too. There's an old economy. Including electrical equipment. I would like to mention Schneider, and although I momentarily forget the name of its German competitor, it is worth noting that these companies originated in the 19th century during the advent of electricity. Today, they have new markets, with valuations that are 'inflated', a bit like those of a start-up, as they provide some solutions to innovative activities within their operations.

So yes, there will be new names, and yes, there will be old names that will be back in vogue.

1:06:42 – Emmanuel Laborde

So let's be confident.

1:06:43 - Emmanuel Laborde

It was Siemens you were looking for, wasn't it?

Stéphane Colliac

That's right.

1:06:48 - Emmanuel Laborde

All right. We're coming to the end of this session – it's 5:08 p.m. We've gone a little over time, but that's because your questions were excellent and we wanted to address them all. Thank you for joining us in this rather warm studio for today's discussion. A closing remark is always a tricky business; we're trying to draw some conclusions in light of the current geopolitical situation. With all the challenges that lie ahead, it's not exactly straightforward. But anyway, how do you envisage – economically speaking, of course – the end of the year and the next six months, in positive and negative terms? What factors might influence the global economy, Isabelle?

1:07:23 – Isabelle Mateos y Lago

Yes, I think we can remain positive, especially if the agreement – which we're told was signed electronically yesterday – holds up in the Gulf. However, it's clear that to be truly optimistic, we'd require the potential for accelerated initiatives aimed at structural transformation of economies in Europe, though not exclusively there. From that perspective, I believe that if we are to consider both negative and positive influences, we must avoid shocks, although they are inevitable. The most important thing, in my opinion, would be – at least in terms of economic policy messages, though I'm not sure if this is the most relevant point for this audience – to prevent shocks that lead to interest rate rises.

In particular, fiscal irresponsibility – a very bad idea – and monetary irresponsibility that would allow inflation to spiral out of control – also a very bad idea.

Because we are in an environment where there is a huge need for investment – and, therefore, a huge need for financing – and anything that further contributes to pushing up interest rates in this context is counterproductive. Conversely, there is a genuine

need for economic policies – especially in Europe – that enable businesses to innovate, invest and grow. We really need more economies of scale in Europe. So everything to do with mergers, the completion of the single market – all these policies – have been clearly identified. We absolutely must step up the pace.

1:08:49 – Emmanuel Laborde

These will be tremendous opportunities. I extend my thanks to the economists and to all of you for tuning in – we appreciate the many viewers, both live and those watching the replay. You should normally see a QR code on the screen; please feel free to scan it with your phone, which will take you to a dedicated page we've created for this purpose, featuring content that will complement everything we've discussed today. As Economic Research produces a great deal of content in shorter formats or in print, this will enable you to delve deeper into the information we've shared with you today on these two topics.

1:09:21 - Emmanuel Laborde

Thank you for your continued participation; have a wonderful summer and see you soon.