The Economics of Artificial Intelligence

Dr David Rees — October 2026

Thank you for inviting me to take part in this conference.

I'm going to start with **Schumpeter and his theory of Creative Destruction**.

As science and technology progress, new technologies replace old technologies.

We don't have to go back to Manchester during the Industrial Revolution, or to Silicon Valley today, to see creative destruction. We can see it here in Angers.

Thomson started in Angers in 1957. By 1971, it employed around **2,800 people**, initially making televisions and later digital television boxes. The factory finally closed in 2012.

Bull opened in Angers in 1961 and became a major European computer manufacturing centre. In 2002, around **650 people lost their jobs** when part of the activity closed. But Bull survived and today produces **supercomputers**.

Between 2002 and 2012, Angers lost a large proportion of its employment in electronics and computer manufacturing.

And yet the electronics industry in Angers did not disappear. By 2016, the broader electronics ecosystem once again represented around **7,000 jobs**, increasingly concentrated in new activities.

This is what Schumpeter called **Creative Destruction**. New technologies destroy old activities, but they also create new ones.

So the question with Artificial Intelligence is:

Will this happen again — and how quickly?

Marx gives us another idea: **historical dialectical materialism**.

It sounds complicated, but the basic idea is simple. Man changes his environment and then this new environment changes man.

Artificial Intelligence could perhaps be one of the greatest paradigm shifts in human history.

I have been invited today to talk about **the economics of Artificial Intelligence**.

So how can we summarise in ten minutes what is going on?

New technology increases **productivity**, which can reduce costs and create new products. Some jobs disappear, but new activities and new jobs emerge.

The losers — particularly those who lose their jobs — obviously need economic and social protection, as well as retraining.

For Europe, the ECB estimates that rapid AI adoption could increase the level of productivity by around **4% over a decade**.

Now let's move from Schumpeter and Marx to my hero, **John Maynard Keynes**.

In 1930, Keynes published *Economic Possibilities for our Grandchildren*.

He predicted that technological progress and capital accumulation would produce an enormous increase in productivity and that, within a century, our standard of living could become **four to eight times higher**.

On this, he was remarkably accurate.

But Keynes made another prediction.

He thought that once we could produce much more with much less labour, we would choose to **work less**.

He famously imagined a working week of around **fifteen hours**.

On that, he was much less accurate.

The problem was not his prediction about technology. It was his assumption about **what we would do with the productivity gains**.

Higher productivity can give us higher wages and shorter working hours.

But it can also produce **higher profits, higher asset prices and greater inequality**.

And this brings us directly to Artificial Intelligence.

The fundamental economic question is therefore not simply:

"Will AI make us more productive?"

It is:

"Who will receive the gains?"

Historically, the steam engine, electricity, the internal combustion engine, computers and the Internet all transformed the economy.

With every technological revolution, there were fears that machines would destroy employment.

And yet, historically, technological progress has not produced permanent mass unemployment. Instead, it has created new industries, new occupations and dramatically increased living standards.

But AI may be different in one important respect.

Previous machines principally replaced or augmented **physical labour**.

Computers replaced some routine information-processing tasks.

Artificial Intelligence can potentially replace or augment **cognitive labour itself**.

Suppose AI increases productivity by **20%**.

That does not necessarily mean that society becomes 20% better off.

The gains could go to workers through higher wages and shorter working hours.

Or they could go to the owners of capital through **higher profits, dividends and asset prices**.

So AI is as much a question about **distribution** as it is about productivity.

Now let's turn to investment.

Even before we know how productive AI will eventually be, companies are spending enormous amounts of money building the infrastructure required for it:

data centres, semiconductors, electricity generation, networks and software.

Worldwide AI spending is expected to reach around **$2.7 trillion in 2026**.

We are therefore witnessing one of the largest technology-driven investment booms in history.

But what will be the return on that investment?

And here we can return to Marx.

Companies compete with one another. Each company invests because it is afraid of being left behind by its competitors.

This can produce **over-investment**.

And that leads to another question:

Are we witnessing a technological revolution — or a financial bubble?

In fact, the two are perfectly compatible.

Railways transformed the economy.

The Internet transformed the economy.

But both also produced major speculative bubbles.

Some investors made fortunes. Other investors lost fortunes.

AI can therefore be both a genuine technological revolution and a financial bubble.

And what about France?

We have **Mistral AI**, probably Europe's closest direct equivalent to OpenAI or Anthropic.

This year, Mistral began using debt to finance its infrastructure.

In March, it raised **$830 million** to finance **13,800 Nvidia processors** for its data centre near Paris.

The lenders include **Bpifrance, BNP Paribas, Crédit Agricole, La Banque Postale and Natixis**.

At present, the exposure of French banks is extremely small compared with the size of their overall portfolios.

So this is not currently a risk comparable to the financial crisis of 2008.

But if AI investment becomes increasingly financed by debt, this question will become much more important.

Let's change economist one final time.

After Schumpeter, Marx and Keynes, let's introduce **Arthur Pigou** and the idea of **negative externalities**.

A company can make a private profit while imposing costs on society.

A steel factory makes profits, but it also creates pollution.

Private profit, public damage.

Artificial Intelligence raises exactly this question.

Data centres consume enormous amounts of **electricity and water**.

They can contribute to higher electricity prices, require major investment in electricity networks and create pressure on water resources.

And once they have been built, data centres provide relatively few permanent jobs.

In the United States, this is already creating local opposition to new data centres.

This reminds us of an important economic principle:

The private cost of Artificial Intelligence is not necessarily its social cost.

So, to conclude, I would emphasise **six economic questions**.

First, productivity.
AI could make our economies substantially more productive.

Second, employment.
It will create new activities, but it will also destroy some existing jobs.

Third, distribution.
Who receives the productivity gains: labour or capital?

Fourth, investment.
Trillions of dollars are currently being committed to AI infrastructure.

Fifth, speculation.
Will these investments generate the expected revenues, or are we creating a financial bubble?

And finally, **negative externalities** — electricity, water, infrastructure and the environment.

Schumpeter explains why old activities disappear and new ones emerge.

Marx reminds us about competition and capital.

Keynes asks us what we do with the gains from productivity.

And Pigou reminds us that private profit does not necessarily take account of the cost to society.

So perhaps the fundamental question is not:

“Will Artificial Intelligence transform our economy?”

It already is.

The real question is:

“Who will benefit — and who will pay the price?”

Thank you.