



By: Dani Rodrik

Europe should not look to US and China while solving its productivity crisis



Europe faces a productivity crisis. Over the past quarter-century, its labor productivity has risen only **half as rapidly** as that of the United States, widening the gap between American and European incomes.

Thanks to higher public expenditures, stronger labor-market institutions, and superior safety nets, the benefits of European economic growth are better distributed.

But without improved productivity, European economies and democracies will remain at risk.

That is why European leaders have been sounding the alarm. Mario Draghi, the former president of the European Central Bank who authored an influential 2024 **report on European competitiveness**, calls the productivity imperative an **existential challenge**.

To focus more attention on the issue, he and other top European business leaders and academics recently came together to form the **Rhine Group**, whose website laments that, "Of the fifty largest technology companies in the world, only four are European."

Europe feels squeezed between the US and China. The US may hold a thin lead over China in AI and other frontier technologies, but China is rapidly making up the difference.

It is already the world's top source for international patent applications, its share having increased from 3% to 33% between 2000 and 2022, when the EU's share fell from 30% to 16%.

It is not surprising that much of the European discussion revolves around the need to emulate and catch up with the two technological superpowers.

But, in fact, neither the US nor China offers a relevant or attractive model for Europe.

Innovation does not automatically lead to higher

productivity

True, the Silicon Valley model of innovation, with its reliance on a rich pool of venture capital and strong links to academic research, has much going for it.

It is responsible for most of the key innovations of the digital age.

But it does a poor job of diffusing the benefits of innovation throughout the economy, which is what matters for overall productivity.

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Innovation does not automatically produce increased productivity unless it raises the capabilities of broad segments of society, including workers and small businesses.

That is why periods of innovation do not necessarily correlate well with productivity booms.

Within the US, there was a pronounced slowdown in labor productivity growth after the 1970s oil shocks, despite the onset of the digital age and mass computing in the 1980s.

The decade before the COVID-19 pandemic had the lowest US rate of productivity growth since the end of World War II, even though there was no apparent slowdown in innovation. Nor are these deficiencies confined to macroeconomic figures.

The US model has produced highly concentrated wealth and economic power, which now lies at the root of America's political dysfunction and polarization.

European economic activity is concentrated in services

China's productivity growth, meanwhile, remains heavily reliant on manufacturing.

China has led the way in electric machinery, electronics, solar products, electric vehicles, and batteries.

But while it is true that manufacturing has traditionally been critical both for innovation and jobs (as Europe's own history shows), it will necessarily play a small role in Europe's future.

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After all, European jobs and economic activity are already heavily concentrated in services and will remain so.

It would be a mistake to try to emulate China's trade and industrial policies to revive the fortunes of Europe's manufacturing firms, other than for national-security reasons.

Raising productivity in services presents very different policy challenges.

Europe should not compete with the US and China on their own terms

Europe cannot and should not compete with the US and China on their own terms. It has little choice but to develop its own, distinct **productivist model**.

The key to boosting European productivity will lie in deploying and disseminating technological and organizational innovations throughout the economy, regardless of where the innovation is generated.

Consider some examples. Cellular telephony and handheld phones were both developed initially in the US.

But Europe moved well ahead of the US in mass adoption and established the Global System for Mobile Communications (GSM) standard, which helped European firms such as Nokia and Ericsson dominate global markets until smartphones took over.

Europe was unable to turn its head start in handheld phone technology into commercial success in smartphones

Similarly, nuclear reactors were developed in the US and the United Kingdom, but it was France that turned them into a predominant source of electricity generation.

Industrial robots and numerically controlled machines were developed in the US, but it was Germany (and Japan) where factories used them to greatest effect.

There are plenty of cases that go in the opposite direction as well. The internal combustion engine, the World Wide Web, and the wind turbine were all invented in Europe, but it was America and China that made the most of them.

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The Dutch company ASML is the global leader in photolithography machines, but Europe lags badly in the \$1 trillion-plus global market for the semiconductor chips these machines produce.

Europe's own model

Targeting outcomes downstream of innovation opens a new perspective on Europe's productivity challenge.

It suggests a somewhat different focus than current preoccupations with startups, big tech, capital-market integration, and global competitiveness.

As a recent **EU report** shows, the bottlenecks—finance, scale, regulations, organizational changes—differ across activities and cannot be presumed ex ante.

The solutions Europe needs are more in the nature of “industrial” policies based on public-private collaboration that discover and unlock binding constraints to effective deployment in specific technological streams.

Instead of emphasizing innovation per se, a distinctly European approach would emphasize adoption and diffusion.



Europe's lag in AI raises difficult questions, but it does not change the nature of the remedy

Deployment of organizational and technological innovations will be especially important in services such as retail, gig work, hospitality, and care, where the bulk of jobs will be.

Since most such activities are not exposed to the international economy, competitiveness is a poor lens through which to formulate the requisite policies.

Europe's lag in AI raises difficult questions, but it does not change the nature of the remedy.

Investment in data centers and compute is extremely costly, and the bulk of the gains will be generated through AI use, which can happen anywhere that has access to the cloud.

For national-security purposes, Europe may want to avoid an excessive reliance on the US (or China).

But as long as AI users are not cut off from data centers, the productivity benefits will depend less on where compute is located than on the appropriate deployment of AI.

Last but not least, downstream dissemination has the advantage that it is more consistent with Europe's own model of a social market economy.

Unlike the US, the European approach should aim to use technology in the **service of people**, rather than the other way around.

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