Política industrial | Selecció de texts

1. Política industrial de l'Administració Biden

"A new breed of industrial policy is taking hold in the United States. Under President Joe Biden's leadership, the federal government has created major new programs through the Infrastructure Investment and Jobs Act ($550 billion), the CHIPS and Science Act ($280 billion), and the Inflation Reduction Act ($394 billion). These are not traditional spending measures to stimulate demand. Rather, as Secretary of the Treasury Janet Yellen explains, they are supply-side investments to boost US economic capacity, both overall and in key sectors such as semiconductors and renewable energy.

While the individual provisions and funding processes differ, all three programmes are based on the public-private model that has been critical to US competitiveness over the past century. They are designed to crowd-in and accelerate private investment, not substitute for it (…)

The programmes also will encourage more supportive regulatory changes, for example, in the permitting and siting of green-energy projects, by state and local governments, which are responsible for the bulk of economic development in the US. And they share various features that have come to define a new "sustainable and equitable" approach to industrial policy (…)

All three bills include place-based programmes designed to promote inclusive growth, and these have elicited complementary efforts at the state and local level (…)

Finally, a healthy, skilled workforce is the most important factor in attracting and retaining employers and businesses in key sectors. Hence, many states, cities and regions have been increasing their investments in workforce development to ensure that their residents have the right skills to benefit from new job opportunities in infrastructure, semiconductors, and climate-related industries (…)

The Biden administration's three big industrial policy programs all recognise the importance of human capital in building supply capacity, and each provides some support for skills development, primarily through tax credits to employers (…)

By design, the new regional economic-development efforts are cross-sectoral and cross-governmental, from the state and local level to the federal level (…)

Industrial policy is central to Biden's economic agenda. Getting an industrial policy right is never easy, and getting a place-based one right will prove even more challenging. But doing so is now essential to achieving more equitable and sustainable growth."

Tyson, Laura; Lenny Mendonca (2023): "America's new era of industrial policy"
https://jordantimes.com/opinion/project-syndicate/americas-new-era-industrial-policy

"A fundamental component of both Bidenomics and California's economic strategy is robust world-class research to support innovation in global growth sectors. It is these sectors that will drive productivity growth, create good jobs and fuel US exports and wealth creation now and in the future."

Tyson, Laura; Lenny Mendonca (2021): "From California capitalism to Bidenomics"
https://www.socialeurope.eu/from-california-capitalism-to-bidenomics

2. Cicles d'expansió i contracció de la política industrial als EUA?

"President Reagan had a unique political talent for explaining complex matters of policy and strategy in simple terms. In 1986, he summed up the state of the U.S. economy under the Carter administration:

> 'Back then, the government's view of the economy could be summed up in a few short phrases; if it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it.'

Over eight years, the Reagan administration successfully rolled back excessive government interventions of the Kennedy, Johnson, Nixon, and Carter administrations, unleashing the productive capacity of the U.S. economy. This consensus mostly held through the George H.W. Bush, Clinton, and George W. Bush administrations. But the Obama administration featured a return to heavy government intervention in the private sector, particularly through its turbocharged expansion of the regulatory state, delivering an economic constipation similar to that which plagued the U.S. before the Reagan revolution. The Trump administration's pursuit of tax reform, deregulation, and fair trade produced noninflationary growth that generated the fastest increases in real wages in a generation.

Yet the Biden administration actively chose to disregard the roadmap for economic dynamism that Presidents Reagan and Trump left behind. Instead, the Biden administration reached back for the Carter model. 'Bidenomics,' or under Treasury Secretary Janet Yellen's more nomenclative framing of 'modern supply side economics,' is neither modern nor supply side nor economical. At its core, Bidenomics represents a return to the discredited economic philosophy of central planning.

President Biden's economic team hoped (…) that the Bidenomics experiment would result in a 'new equilibrium of higher productivity, higher wage growth, [and] higher GDP growth as a result of this set of policy interventions.' But like all prior attempts at central planning, it failed to deliver prosperity, and instead generated a substantial upward price-level shock, accompanied by an insidiously persistent inflationary environment that has eroded standards of living in the United States. Continual economic anxiety has replaced abundance and prosperity."

Bessent, Scott K.H. (2024): "The Fallacy of Bidenomics: A Return to Central Planning"
https://manhattan.institute/article/the-fallacy-of-bidenomics-a-return-to-central-planning

3. Bidenomics i nivell de vida de la classe treballadora

"Joe Biden's supporters in the political establishment seem increasingly perplexed. Although they insist that the administration's economic policies – marketed as 'Bidenomics' by the DNC – have been a huge success, the public isn't buying it. In one recent poll, only 28% of Americans said they were satisfied with the economy (…)

Biden's economic policies, exemplified by legislation such as the CHIPs Act and the Inflation Reduction Act, aim to increase manufacturing investment in the US. The Biden administration argues that, by 'bringing manufacturing back to America,' it is creating high-paying jobs, while simultaneously 'addressing the climate crisis' through investments in green energy.

Biden and his supporters are correct to point out that millions of people have gotten new jobs. But despite the big increase in the percentage of people who are working, the typical family is actually getting paid less in real terms, taking inflation into account: according to data from the Federal Reserve, real median household income has been falling during the entire time Biden has been president.

Families at the low end of the income distribution have been hit especially hard. Last year the poverty rate more than doubled, and the number of people struggling with hunger jumped to 44 million, an increase of 10 million from the year before (…) over the past few years, businesses have increased prices at the fastest rate in four decades, reducing what workers can afford to buy with the wages they receive (…)

Workers have not passively accepted the decline in their living standards. There have been a series of organizing drives, and strike activity for this year is at the highest level in over two decades. But Biden – notwithstanding his tedious speeches about being "pro-labor" – has actually worked behind the scenes to push union leaders to negotiate settlements acceptable to CEOs."

"The bottom line is that whether Biden is successful in bringing new manufacturing jobs to the US or not, workers cannot count on him to improve their living standards. Although there was a period in the past when industrial workers were paid relatively well, this was because they built strong unions and were willing to physically fight against strike-breaking by corporations and the federal government."

"Biden has also promoted his economic policies as a way to address climate change, and the legislation he has promoted has included some new funding for clean energy. These policies fall far short of what is needed, however. To stop climate catastrophe, the US needs to rapidly decrease its carbon emissions, but emissions in 2022 actually increased."

"Emissions in the US grew to 5.9 billion metric tons in 2022, and scientists estimate that each new ton of carbon will ultimately cause about $185 worth of future economic damage. This means that the future economic losses caused by 2022's carbon emissions will be around a trillion dollars – enough to cancel out the entirety of measured real income growth for the year."

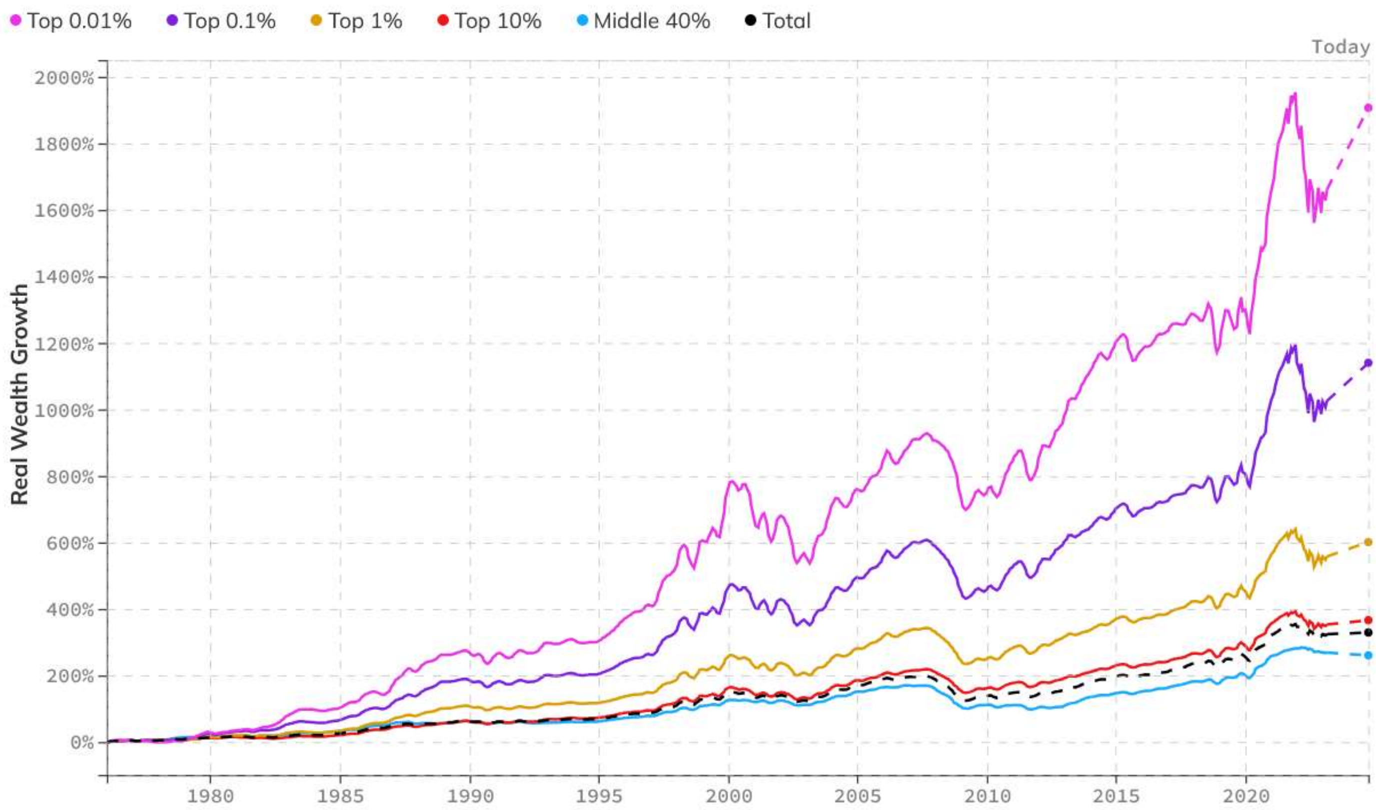
"Biden's economic policies have not addressed climate change or runaway income inequality. In fact things have only gotten worse. So then what was the point of "Bidenomics"?

It is important to understand Biden's policies in the larger context of Washington's New Cold War with Beijing. For both sides of the conflict, the geographic location of production, and especially the production of advanced semiconductor technology, is a key strategic concern. This – and not some abstract desire to 'invest in Americans' – is why Democrats and Republicans now increasingly seek to bring investment back to the US.

But for the capitalist politicians who make up both parties, the only way to 'reshore' production is to convince corporations that it is profitable to do so. That means making sure workers are paid as little as possible, and absolutely avoiding anything like taxing corporations to fund a Green New Deal. Although Biden will pay lip service to progressive ideas, his real position is revealed in the fact that, instead of using the country's enormous wealth to improve people's lives, he is asking Congress for a hundred billion dollars in new military spending to prolong the war in Ukraine and support the Israeli regime's criminal assault on Gaza."

Thompson, Stephen (2023): "Working More, Making Less: Life Under "Bidenomics"
https://www.socialistalternative.org/2023/11/05/working-more-making-less-life-under-bidenomics/

4. Creixement de la riquesa per adult als EUA (dades mensuals des de gener de 1976)



https://realtimeinequality.org/?id=income&incomeend=03012023&incomefreq=monthly&incomegroups=Top%201%25&incomestart=01012021&incometype=posttax_income&incomeunit=Adults&incomey=level

5. Programa del govern d'Espanya d'ajuda a PIMEs

"Las pymes españolas recibirán un impulso gracias a la inyección de fondos procedentes del Plan de Recuperación, Transformación y Resiliencia. El Gobierno ha anunciado una inversión sin precedentes de 4.500 millones de euros en subvenciones y cerca de 50.000 millones de euros en préstamos e instrumentos financieros, destinados a modernizar el tejido productivo y potenciar la competitividad de las pequeñas y medianas empresas. Esta inversión estratégica se convierte en una oportunidad única para la transformación y el crecimiento del sector (…)

El presidente del Gobierno, Pedro Sánchez, ha destacado la magnitud de esta inversión, afirmando que 'nunca en la historia se ha puesto semejante volumen de recursos económicos para modernizar nuestro tejido productivo'. Esta inyección de capital se distribuirá a través de diversos programas e instrumentos, entre los que destacan:

- **Subvenciones Red.es**: 1.380 millones de euros destinados a la digitalización de las pymes.
- **Subvenciones PERTE** (Proyectos Estratégicos para la Recuperación y Transformación Económica): 3.000 millones de euros para impulsar proyectos innovadores en sectores clave.
- **Garantías CERSA** (Compañía Española de Reafianzamiento): 630 millones de euros para facilitar el acceso a la financiación.

- **Fondo de Impacto Social y Fondo de Coinversión de COFIDES** (Compañía Española de Financiación del Desarrollo): 2.400 millones de euros para promover la inversión con impacto social.
- **Líneas ICO** (Instituto de Crédito Oficial) **verde e ICO empresas y emprendedores**: Más de 30.000 millones de euros en préstamos para financiar proyectos de sostenibilidad y emprendimiento.
- **SETT** (Sociedad Estatal para la Transformación Tecnológica), **PERTE Chip, Fondo Next Tech y línea Audiovisual Hub**: 16.400 millones de euros para impulsar la transformación tecnológica en sectores estratégicos."

https://www.moncloa.com/2024/10/03/el-presidente-pedro-sanchez-anuncia-4-500-millones-en-subvenciones-para-pymes-2913379/

6. Arguments contra una política econòmica intervencionista i activa (A. Hirschman, 1991)

- La tesi de la perversitat (*perversity thesis* o tesi de l'efecte pervers): intentar transformar la realitat social en una sentit la transforma en el sentit oposat. En concret, solucionar un problema mitjançant la intervenció pública només agreuja el problema. Exemple: l'argument que establir o incrementar un salari mínim redueix l'ocupació i així la massa salarial cau en comptes de pujar.
- La tesi de la futilitat (*futility thesis* o tesi de l'efecte inútil): intentar transformar la realitat social no aconsegueix canviar res. La intervenció pública no canvia les coses, només crea la il·lusió que canvien. Exemple: l'argument que certes ajudes monetàries adreçades a grups desafavorits (' Renda garantida de ciutadania') són fútils perquè aquests grups no tenen mitjans (ordinadors, mòbils) o coneixement (són gent molt gran o no estan al cas de l'existència de l'ajuda) per a demanar-les.
- La tesi del perill (*jeopardy thesis* o tesi de l'efecte destructor): intentar transformar o reformar la realitat no surt a compte perquè es poden perdre assoliments previs. Exemple 1: l'argument que el control del preu dels lloguers (perquè el preu del lloguer es considera elevat) redueix l'oferta de lloguers, desplaça demandant de lloguers al mercat de compra de l'habitatge i s'incrementa el preu de la compra d'habitatges (i fa que ara el preu de compra sigui elevat). Exemple 2: la tesi que l'estat de benestar (i tota expansió en l'àmbit d'actuació del sector públic) són una amenaça a la llibertat individual (si no hi ha consens en una política pública, aquesta s'ha d'imposar coercitivament i, per tant, hi haurà una pèrdua de llibertat).

Hirschman, Albert O. (1991): *The Rhetoric of Reaction. Perversity, Futility, Jeopardy*, Belknap Press.

7. Biden sobre la seva política econòmica i sobre l'alternativa (MAGAnomics)

"... since I've come to office, all they've really done is attack me and my economic plan ... even though we've created ... over 13 million jobs — more jobs in two years than any president has created in a four-year term ... even though we've had 19 straight months of unemployment under 4 percent for the first time in American history ... even though we have the lowest inflation rate of any major economy in the world, with core inflation rate the last three months at 2.4 percent. We got more to do, even though we've created 800,000 manufacturing jobs and a manufacturing boom we haven't seen in decades.

Even though America, as we met here — meet here today, has the strongest economy in the world. Let me say that again: America has the strongest economy in the world of all the major economics."

"For all the time they spend attacking me and my plan, here's what they never do: They never talk about what they want to do (…) Look, we're going to talk about the MAGA Republican economic plan (…) All kidding aside, we've all worked with Republicans on the other side. Over our careers, we've become good friends: honest, decent people. Disagree like hell with them, but they were … They thought the institutions mattered (…) Our democracy is at risk because I don't think they do think it matters anymore."

"Look, their plan — MAGAnomics — is more extreme than anything America has ever seen before … But up to now, Republican have given us a failed plan of trickle-down economics that didn't work … Instead, there's what trickle-down economics did. It … shipped jobs overseas … : Find the cheapest place in the world for labor, send the jobs there and the product there, and then import the product home.

Well, you know, they hollowed out the main streets of America, and they did the same for the middle class. They blew up the deficit. It produced an anemic economic growth, if any growth at all. And it stripped the dignity and pride and hope out of a community, one after another."

"Now Republicans in Congress are doubling down with a plan that does three things.

One, it cuts taxes even more for the very wealthy and big corporations.

Two, it cuts Social Security and Medicare and Medicaid.

Three, it raises costs for families, gutting investments in the middle class."

"MAGA Republicans in the Congress are also trying to undo the progress we've made to make it … — what they call the G7, among the NATO countries and European countries — I was able to get them to all agree — and then around the world; all the democracies — agree that we were going to have a global minimum tax on … corporations.

And that global minimum tax was finally agreed. It took me a better part of a year to get it done … They want to get rid of it, let corporations go back to shifting jobs and profits overseas, and avoiding paying taxes at home. And who is going to pay for that? … Seniors and hardworking Americans are going to pay for it."

"MAGA Republicans don't think we should be investing in education … MAGA Republicans in Congress want to slash Pell Grants. More than 6 million students who count on these grants to be able to afford to go to college would lose them … You saw how they took on my attempt to eliminate student debt. Well, we're still going to eliminate a hell of a lot of student debt."

"… they want to slash research on cures for cancer and Alzheimer's by nearly $4 billion … They want to cut funding that guarantees the clean air and clean water … they want to cut 226,000 teachers and staff."

"… my predecessor … created more debt than any other president did in one year … when he passed that $2 trillion tax cut skewed to the wealthy and big corporations, they didn't pay for a penny of it. The end result was that it has ballooned the national debt by nearly 40 percent."

"… we just cut the budget deficit by … $160 billion. A hundred and sixty billion. You know how we did it? By giving Medicare the power to negotiate for lower prescription drug costs."

"We pay more for drug prices — for prescription drugs than any nation in the world … you're going to pay somewhere between 20 and 40 percent less in those other countries [Canada, UK, France, Spain]."

"Just a few years ago … 55 percent of the … largest corporations in the Fortune 500 paid zero in income tax, and they made $40 billion … Now the biggest corporations have to pay a minimum tax of 15 percent, so they don't get away with paying nothing … Not only are they refusing to take corporations — make them pay their fair share … MAGA Republicans are planning to give an additional … $1 trillion tax cut for big corporations … Apparently, they think corporations, which made record profits in recent years, pay too much in taxes. It's unbelievable."

"… we've gone, in the pandemic, from about 740 billionaires in the America to a thousand … These billionaires pay an average of … less than 8 percent in federal taxes … They pay a lower federal tax rate than a firefighter, a teacher, a cop. How can that be right? … It's time billionaires began to pay at least a minimum tax of 25 percent, for God's sake. (Applause.) They'll still be multibillions at that."

"That's why I promised that no one making under $400,000 … will see their federal taxes go up a single penny … All the things we do for middle-class and working-class families increases economic productivity."

"… there are only two presidents in American history with fewer jobs the day they left office than when they started. One was President Hoover, and the other was Donald 'Hoover' Trump. (Laughter.) … And, look, you may remember my predecessor promised to be the greatest job president in history. Well, it didn't really work out that way. (Laughter.) He lost two million jobs over the course of his presidency. … But … we've created 13.4 million new jobs. We not only recovered all the jobs we lost during the pandemic, we've added millions more. We've seen record lows in unemployment … particularly for African Americans and Hispanic workers and veterans … and the workers without high-school diplomas. The lowest unemployment rate in 70 years for women now … A higher share of working-age Americans are in the workforce now than any time in the past 20 years."

"… my dad used to have a saying … "Joey, a job is about a lot more than a paycheck. It's about your dignity. It's about respect. It's about being able to look your kid in the eye and say, 'Honey, it's going to be okay,' and mean it." That's Bidenomics."

"The prior administration promised to revive manufacturing; they failed. I'm not sure they even tried, to be honest with you … they had a theory, and it shipped jobs overseas for cheaper labor markets and import the product … We used to … have the largest economy in the world in terms of manufacturing. Under my presidency, America has surged to the front again. We're now on track of having the strongest economy in the world for decades to come."

"Great real estate builder — the former president. He didn't build a damn thing … Can you believe we used to have the best infrastructure in the world … But guess what? We fell to — and ranked number 13 in the world … When I signed the bipartisan infrastructure bill these guys helped me get through, we're now investing in America again: our roads, our bridges, our ports, our airports, high-speed Internet, and removing lead pipes from everyone so they have access to clean water … you can't have the strongest economy in the world without the best infrastructure in the world. We're making sure we're growing the economy in a way that benefits all Americans. We awarded a record $70 billion in federal [contracts] to small, disadvantaged businesses, and more Black small businesses are starting up than at any time in American history. Now we have the fastest economic growth from the pandemic of any world economy. We have the lowest inflation rate among the major economies.

"… we're living through one of the greatest job-creation periods in our history. And, folks, it's not an accident … That … is our economic plan in action — Bidenomics in action."

"But you hear from our friends on the other side, the MAGA Republicans, what's wrong with America. Everything's wrong with America. They keep telling us America is failing. Well, they're wrong. They're failing. America is not failing. America is winning. And there's one reason for it: you. All you people get up every single morning and go out to try to do the right thing."

"We just have to remember who the hell we are: We're the United States Of America … There is nothing beyond our capacity."

"Remarks by President Biden on Bidenomics, Largo, Maryland, September 14, 2023"
https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/09/14/remarks-by-president-biden-on-bidenomics-largo-md/

8. Política industrial: política invisible tornant-se visible?

"Industrial policy was once so out of fashion that it was jokingly called 'the policy that shall not be named.' Now it's back in a big way. On issues ranging from clean energy to semiconductors to Covid-19, governments are trying to improve the performance of key business sectors. Can they manage to do so without subverting competition and subsidizing special interests?"

https://www.promarket.org/category/news/series/industrial-policy/

9. Ignorància acadèmica sobre política industrial

"As countries openly embrace industrial policies, social science—and economics in particular—is faced with a knowledge deficit. Put simply, scholarship around industrial policy has left us bereft of a systematic understanding of these policies. We are missing an empirical roadmap for how to perform industrial policy."

"Where industrial policies are multidimensional and complex, our understanding is inadequate across nearly every dimension. The abandonment of industrial policy as a serious object of study has left us with an oddly piecemeal understanding of practice … We need evidence, data, and concreteness, and we needed it yesterday. After a decades-long intellectual hiatus, industrial policy must be taken seriously as an object of study by the economics discipline. In doing so, scholars need to interrogate how industrial policy is practiced *in* practice."

"… since the 1980s, industrial policy has receded as a serious object of inquiry in economics. The height of globalization and, with it, the triumphalism of the Washington Consensus, signaled the nadir of industrial policy as a serious subject of study within mainstream economics. Academic economics saw industrial policy as *old hat*, part of the structural developmentalism of the previous generation of economics.

Yet while industrial policy was declared dead, practice hummed along anyways. Academic economics may have turned away from policymaking, but the exigencies of the real world meant that industrial policy never truly went away; it merely faded from the view of mainstream academia, and public oversight. In the early 1980s, Robert Reich observed that governments always end up doing industrial strategy, only without a coherent strategy."

"The rise of international agreements constrained industrial policy in its most conspicuous forms, yet these interventions never went away … industrial policy merely mutated and took new forms."

"Gary Becker perhaps best exemplified the spirit of the debate in 1985: 'The best industrial policy is none at all.'"

"To this day, much work in economics has been dedicated to demonstrating that industrial policy does not work, even empirically. This 'impossibility theorem' view of industrial policy permeates the conversation surrounding industrial policy to this day. Inspired by debates about central planning, some of the most vocal critics have followed a Hayekian and Austrian route, claiming that 'industrial policy is literally impossible.' Confronting the details of actual practice is largely second order."

"… it is a tall order to claim that industrial policy is, literally, impossible. Whilst important for intellectual debates, it is often lateral to the realities of practice. These claims are also open to being falsified by empirical work. Historically, for example, they require social scientists to confront episodes where industrial policy featured conspicuously in post-war development, including the experiences of Taiwan, Singapore, Japan, South Korea, and, more recently, China. Today, these claims implore us to erroneously reject emerging work on the efficacy of place-based policies, or innovation policy and R&D, two literatures where empirical evidence has rapidly expanded."

"To the extent that the mainstream economics permitted the role of industrial policy, such as the World Bank's post-mortem of the East Asian growth miracle, it nevertheless located success with largely getting market fundamentals right. It was largely left to political scientists, comparative sociologists, and heterodox economists in seminal qualitative work to unpack the practice and role of industrial policy in the East Asian growth miracle (…) However, the empirical turn in development economics has slowly challenged the impossibility theorem-style arguments against industrial policy. As industrial policy re-emerged over the past decade, empirical work has begun evaluating the tenants of these policies (…) When subject to serious empirical study, it turns out that the theory of industrial policy is very much relevant."

"Yet, although the empirical turn in economics has finally reached the industrial policy debate, practitioners of industrial policy still lack fundamentals. Not only is the econometric work on industrial policy still in its infancy, the policy world lacks something more fundamental: empirical basics. Specifically, we do not yet understand the descriptive facts, nor do we have measures of contemporary policy practice."

"… goal-oriented actions aimed at changing the composition of economic activity – the definition of industrial policy."

"We see that the industrial policies used today are a far cry from caricatures of overt post-war protectionism. Policies tend to take the form of financial lending and export support, and much less so tariffs. These industrial policy levers also tend to be granular, often targeted toward specific clusters of industries. Although, like the past, manufacturing is an omnipresent feature of targeting: economies across the income distribution target capital goods, as well as heavy industry. Given the seemingly technocratic nature of industrial policy that emerges, we find a strong relationship between the flow of new industrial policy and a country's income."

"According to our data, high-income countries implement about five times as many industrial policies, on average, as low- to middle-income economies. Among these latter countries, it is mostly industrialized, middle-income economies using industrial policies."

"Simply put, advanced, high-income countries have the state capacity to deploy technocratic industrial policies, and doing so may be challenging for lower-income countries. Thus, the patterns in our data suggest the need to invest in state capacity, as well as the need to understand the institutional demands of advanced industrial policies."

"… industrial policy never went away—it's been alive and well in the developed world, even while academic economists read its eulogy. As the world starts to take industrial policy seriously, economics should take these policies seriously, too, as an object of study. Economists must perform the hard work of establishing the basic facts surrounding these controversial policies. We're already late."

Lane, Nathaniel; Réka Juhász (2023): "Economics Must Catch Up On Industrial Policy"
https://www.promarket.org/2023/03/14/economics-must-catch-up-on-industrial-policy/

10. Arguments a favor d'una política industrial verda

"… you can say one thing for President Biden: he's gone large on industrial policy. The Inflation Reduction Act (IRA) is America's biggest ever piece of legislation to combat climate change. It contains $400 billion in subsidies for solar, wind, electric vehicles, and other green activities."

"… the U.S. is finally getting serious about climate policy. But it's doing so using industrial policy, not carbon pricing, which economists believe to be the single best way to limit greenhouse gas emissions. With a carbon price, polluters pay the true social cost of carbon, and people—rather than the government—choose how to adapt. Unfortunately, there is massive political opposition to the high levels of taxation this would entail, not just in gas guzzling America, but also in Europe, as the French Yellow Vest movement amply demonstrated."

"It's tempting then to see the choice of subsidies over market mechanisms as a purely political move, without any economic backing. But that's a mistake. The transition to net-zero emissions is about more than taxes and regulation: it is fundamentally a growth story where we seize opportunities to speed up the adoption of clean technologies and boost green innovation."

"The reason why climate change policy is so hard is that global warming is the mother of all market failures. The cost of greenhouse gas emissions isn't captured in prices, and so markets can't address them. That's the massive failing that carbon prices are designed to solve. But there are other market failures in play as well. In the international arena, there's a free rider problem: Every country has a strong incentive to free-ride off the efforts of other countries, and even 'binding' international agreements such as the Paris Agreement are devilishly hard to enforce. Countries see the need to lower emissions, but each one wants the other to act first."

"Finally, the transition to clean energy is a technology problem and there are significant market failures involved there, too. The natural course of events is that new ideas build upon old ideas. Since humanity has a big stock of fossil fuel knowledge this makes dirty innovation easier than clean innovation. Shifting the technological trajectory is like changing the direction of a supertanker. Carbon prices help re-direct the ship, but only slowly as consumption patterns change. Green R&D incentives can complement carbon taxes to make the change much more quickly."

"When there are market failures due to learning by doing, technology spillovers, and financial constraints, government subsidies can help—think of China's solar industry or South Korea's phenomenal growth … And if investing in green industries helps a nation build up the new industries of the future, this can help overcome this global free rider problem … There are strong benefits of a single country's taxpayers subsidizing green innovation both for global growth and for tackling climate change: knowledge flows across international boundaries, just like pollution."

"The potential downsides from industrial policy should not be ignored. Managerial attention can shift from competing for customers to competing for state handouts. Furthermore, it stimulates protectionism. The 'Buy American' provisions of the IRA mean, for example, that the full value of electric vehicle tax credits can only be claimed when a car is built in North America. The aim is to stimulate more demand for U.S. based production and jobs."

"Subsidies always have both a scale and substitution effect. The real benefits of the IRA come from increasing the overall scale of clean technologies, it is not accomplishing so much if it simply substitutes activity from Europe to America."

"A subsidy war between the U.S. and other countries can lead to more distortions. Beggar-thy-neighbor policies can mean production being diverted to who pays the biggest subsidies, rather to where it is most efficient. The raison d'etre of the rules-based international trade system (e.g. the much-maligned World Trade Organization) is to reduce government-imposed barriers and distortions to trade and investment."

"There is a better way. The IRA already expands the definition of domestic content to include Canada and Mexico in many of its provisions. Moving to 'friendshoring' instead of 'onshoring' is a good middle way of maintaining a political coalition and enacting green subsidies. Europe and other liberal democracies could also be embraced in this, even if countries like China are left out."

"The Biden administration is not just applying this strategy to climate policy—it hopes to use industrial policy to accelerate science and raise productivity across the U.S. economy. In addition to the IRA, the Infrastructure Act invests $1.2 trillion and the Chips and Science Act a further $280 billion."

"First, there is an emphasis on the importance of technology as the critical way of reviving productivity growth. Whether it's broadband infrastructure in the Infrastructure Act, green tax incentives in the IRA, or semiconductors in the CHIPS Act, these are all ways to raise productivity. Second, the 'science' part of CHIPS has authorized $174 billion for non-semiconductor tech—NASA, climate research, NSF, ARPE-E, etc. This wide-ranging, basic research potentially creates larger spillovers. Third, there are provisions to share benefits with strong labor standards and efforts to include under-represented groups and left-behind areas."

"One problem with these support packages is the risk of the government getting it very wrong in which technologies and firms to support. The more 'horizontal' approaches such as general public R&D funding and a more generous R&D tax credit have less of this industrial policy risk.

Van Reenen, John (2023): "The Case for Green Industrial Policy"
https://www.promarket.org/2023/02/14/the-case-for-green-industrial-policy/

11. Contra la política industrial

"An 'industrial policy' is government action that encourages or directly subsidizes the expansion of some economic sectors over others. Dani Rodrik famously suggested that the core question about industrial policy is not 'why?' but 'how?'. Few mainstream economists believe either that all pricing and resource allocation decisions should be made by the state, or that markets will flourish in a setting with no state contract enforcement, police protection, or dispute adjudication at all."

"Industrial policy is different from regulations that seek to limit or correct 'market failures' such as externalities or information asymmetries. In the case of regulation, state action is focused on restoring Pareto optimality to commercial settings, by imposing taxes and subsidies or licensing requirements. Industrial policy, by contrast, is an evaluation of the direction and speed of the overall growth path of different sectors of the economy."

"Capitalism automatically has a self-executing industrial policy, described by Joseph Schumpeter as 'creative destruction.' Profits are a sign that additional resources devoted to a sector produce greater social welfare; losses are a sign that the opportunity cost of resources being expended in that sector would be better reallocated elsewhere. Industrial policy operates on the margins of these investment decisions, offering subsidies and tax breaks for 'good' industries—green energy in the U.S. right now, for example—and increased taxes on industries (such as tobacco products) that the government seeks to limit."

"Skeptics about industrial policy often take an Austrian perspective, which doubts the bureaucrats, or anyone else for that matter, would have the information necessary to direct an economy better than the signals of profit and loss, or a Public Choice perspective, which doubts that elected officials and the bureaucrats who report to them have any incentive to direct an 'optimal' industrial policy even if they possessed perfect information about the future."

"These two objections, *bad information* and *wrong incentives* … reinforce each other. The tendency of politicians to use taxes and subsidies to threaten enemies and reward supporters actually distorts the profit signals in industry, meaning that the information sent out to investors is misleading and biased toward cronyism rather than producing what consumers actually want. Unsurprisingly, the two iconic examples of 'good' industrial policy … have not held up very well: Japan's spending on industry created a zombie economy that has never recovered. More recently, China's huge government spending on industry has at best had no positive effect if the analysis accounts for the opportunity cost of the investments."

"The seductive mirage of industrial policy thus connects two dangerous illusions … First, the idea that we (meaning elite experts, which is not 'we' at all) could use central planning and direction to do better than the set of investments implied by the profit/loss test is hard to resist. Second, given that we could do better, any suspension of democracy and accountability to the public seems justified, because experts will only use this power responsibly, and for our own good. But the information problem means that experts can rarely do better, and the incentive problem shows that even if they could the contest to control just who would get to appoint the unaccountable benevolent despots would consume all the resources of the society in conflict."

Munger, Michael C. (2023): "Industrial Policy Is a Seductive Mirage"
https://www.promarket.org/2023/01/24/industrial-policy-is-a-seductive-mirage/

12. Per què Europa està perdent la cursa tecnològica?

"The United States is the world's dominant financial and technological power. China is the global manufacturing hegemon. What is Europe's economic leverage? That question lies at the core of a recent report by former European Central Bank President Mario Draghi. In a nutshell, Draghi argues that the European Union is facing huge economic challenges that could soon make the bloc irrelevant on the global economic scene … The EU needs to overhaul its economic model—starting with the way it approaches the financing of innovation—if it wants to avoid being squeezed between the United States and China."

"The causes of Europe's economic woes are structural. Demographics and productivity growth determine long-term economic prospects, and the EU is not doing well on either metric … The EU's workforce could shrink by around 2 million workers each year by 2040 … Things do not look better for productivity, which has grown at a modest 0.7 percent per year on average since 2015—less than half the U.S. rate and a mere one-ninth of China's reported figure … In 1995, U.S. and EU productivity was broadly similar. Today, Europe's productivity is about 20 percent below America's."

"The long list of culprits includes low labor mobility, overwhelming red tape, and flaws in the education system. Low EU expenses on research and development, however, stand out as one of the main drivers of the growing productivity gap between the U.S. and EU economies. The data is striking: At $886 billion, or 3.4 percent of GDP, in 2022, U.S. R&D expenses were more than twice as high as the EU's, at $382 billion, or 2.3 percent of GDP. China is not far behind … On this measure, the United States and China are giving themselves the means to succeed in the global transition toward high-tech, digitalized economies. Meanwhile, the EU is lagging far behind."

"… the Draghi report calls for a financial electroshock to boost R&D spending. His team of economists reckons that the EU needs to spend an extra 750 billion to 800 billion euros per year to close the gap with the United States … It would represent around 5 percent of EU GDP each year—a massive amount by any standard. This is precisely why it is unlikely to happen.”

“The private sector alone would not be able to shoulder such eye-popping costs. In turn, the fate of Draghi’s calls for an investment push will hinge on Europe’s ability to massively boost public spending on R&D. In theory, this scale of funding could be done through joint EU borrowing, which was first used in 2020, when EU member states gave the European Commission the green light to issue up to 750 billion euros in bonds to finance the post-COVID economic recovery. Yet … shortly after the release of the Draghi report, German Finance Minister Christian Lindner declared that ‘joint borrowing will not solve the EU’s structural problems’ … This situation calls for a bold remedy: EU member states should identify a handful of critical sectors and jointly go big in these fields.”

“… the EU should create an EU-level structure to identify and fund priority sectors, essentially transferring to EU institutions the responsibility to spell out which sectors should receive public R&D money … Frontier technologies such as artificial intelligence and quantum computing would be obvious sectors for the EU to go all in … More than 80 percent of global AI funding goes to U.S. or Chinese firms compared with just 7 percent to EU businesses. The gap is similarly striking for quantum computing. Seven of the top 10 global firms in the field are U.S.-based. Two are Chinese, and one is Japanese; none is European.”

“The emergence of EU tech champions would come with an added benefit: It would lift Europe’s place on the radar of global venture capital funds. Since 2013, about five times more venture capital has gone into U.S. start-ups than European ones. The lack of such funding in Europe comes with dramatic consequences for EU startups: Of the 147 unicorns (start-ups whose value stands above $1 billion) that have emerged in the EU since 2008, about one-third eventually relocated abroad, mostly to the United States, often because they could not find sufficient financing in Europe.”

“There is little chance that EU policymakers will answer Draghi’s calls for a massive investment boost … Europe will struggle to finance its generous social model without sustained economic growth. Tackling Europe’s productivity gap should be at the top of the to-do list of the new European Commission.”

Demarais, Agathe (2024): “Why Europe is losing the tech race and what the European Union could do to catch up”

https://foreignpolicy.com/2024/09/26/europe-technology-eu-commission-venture-capital-research-development/

https://www.almendron.com/tribuna/why-europe-is-losing-the-tech-race/

13. Ha caigut Europa en el parany de la tecnologia comuna (*mid-tech trap*)?

“The European Union (EU) continues to lose ground in the global race for promising technologies. When it comes to research and development expenditure in growth sectors such as biotechnology or the digital economy, the USA is far ahead. The Chinese have also risen to become a global power factor in some future technologies in just ten years. In Europe … innovation is concentrated in the automotive industry and similar medium-technology sectors, while the high-growth, high-tech industries are barely involved. ‘The continent is in a mid-tech trap’… Today, the EU is neither represented in the group of the top 20 tech companies nor in the top 20 start-ups. 'The EU is losing the race for innovation' … This would not only mean giving up economic prosperity, but also geopolitical influence … The EU not only invests less than the USA in research and development overall. In Europe, the focus of innovation is also on achieving minor product improvements in old industries such as the automotive sector … This generates far less growth than groundbreaking innovations … One reason for the EU's lack of innovation is low research spending."

"The USA should serve as a role model. In the United States, public research funds are primarily used to promote ground-breaking innovations. Government agencies concentrate on the early stages of development. Hundreds of excellently trained scientists are involved in the process of selecting potentially promising projects from a wide range of fields for funding. In contrast, the European Innovation Council (EIC), which is based at the EU Commission, is dominated by civil servants … The application and selection process for companies interested in funding is also bureaucratic and the regulations are too rigid … A large proportion of the funding granted is concentrated on small and medium-sized companies."

"To escape the 'mid-tech trap', what is needed is not more state funding, but less political control and more scientific expertise."

Die Welt (2024): "Why Europe is losing the race for innovation"
https://ec.europa.eu/newsroom/eismea/items/826237/en

14. Europa necessita esdevenir una potència geoeconòmica

"European countries are increasingly using economic statecraft, such as sanctions, export controls or industrial policy, to respond to geopolitical challenges. To co-ordinate a comprehensive response, the next European Commission needs a geoeconomics vice president."

"Economic statecraft is in fashion. Sanctions, export controls, tariffs, investment screening mechanisms, and trade agreements have become go-to tools for Western states to pursue geopolitical goals. This trend is fuelling the rise of geoeconomics, a term that has two definitions. In a broad sense, geoeconomics analyses the interplay of economics and geopolitics in the areas of trade, technology, or finance. In a narrower sense, geoeconomics refers to the use of economic tools to implement foreign policy – fuelling a merger between geopolitics and economics.

The European Union has long been a big player in geoeconomics, leveraging its economic and financial might to advance its interests. Yet the bloc is proving increasingly ill-equipped to deal with growing geoeconomics-related issues, mostly because of scattered responsibilities between the European Commission and member states. Sanctions, for instance, are adopted at the EU level, but implemented by member states – opening loopholes as European capitals interpret EU-wide rules differently. Conversely, it is up to EU member states to design foreign investment screening regimes – fragmenting the European investment landscape. This situation calls for a bold remedy: the appointment of a vice president for geoeconomics in the next commission."

"The EU and its member states are increasingly using economic tools and leveraging the activities of private firms to pursue foreign policy goals … The implementation of sanctions on Russia, for instance, depends on the private sector. These measures curb the activity of private companies and it is up to banks to check the compliance of the transactions that they process."

"The EU's response to Beijing's increasingly confrontational stance also relies on economic policies. Brussels's strategy currently focuses on de-risking, that is to say reducing economic reliance on Chinese firms for critical goods and preventing the transfer to China of technology that could fuel advances of the Chinese military. To implement its de-risking ambitions, the EU mostly relies on export controls (for instance on semiconductors) and on policies to develop Europe's domestic production of critical goods (such as medicines, clean technologies, or critical raw materials)."

"The EU's economic dependency on China is particularly acute for green technology, which will be crucial for the bloc's energy transition – a third existential challenge that merges economics and geopolitics … The EU is on its own to face the challenges that the war in Ukraine, de-risking, and the green transition pose."

"Boosting the EU's green competitiveness will not be easy, either, as the bloc is increasingly squeezed between America and China. While Beijing is flooding the world with its massive production of cheap green goods, the United States is adopting protectionist policies like the Inflation Reduction Act to develop its own clean technology sector. Washington's strategy highlights how, on many economic issues, Europe's military allies will also remain its economic competitors."

"The EU needs to build some geoeconomics muscle. The first task is to build an overview of how geoeconomics challenges are interlinked … The second task … is to strengthen channels of communication with the private sector on geoeconomics issues. Private firms lament that sanctions, for instance, are handled by at least three different general directorates at the commission. Companies also often first hear about new measures from the media. Here again, a geoeconomics vice president would come in handy … On the international scene, appointing a geoeconomics vice president would boost the EU's credibility towards its allies … The US is not the EU's only ally: a geoeconomics vice president would also help boost engagement with other like-minded partners such as Australia, Canada, Japan, South Korea, and the United Kingdom."

"Beefing up the EU's geoeconomics game would also be a useful strategy towards foes. Market access is the EU's greatest asset: perhaps China would have thought twice before engaging in a trade row with Lithuania if the bloc had threatened retaliatory measures curbing the access of Chinese firms to the entire EU market. Greater EU cohesion also reduces the risk of seeing adversaries play member states against each other. This is critical at a time when Russia and China are seeking to foment divisions across Europe on topics like sanctions."

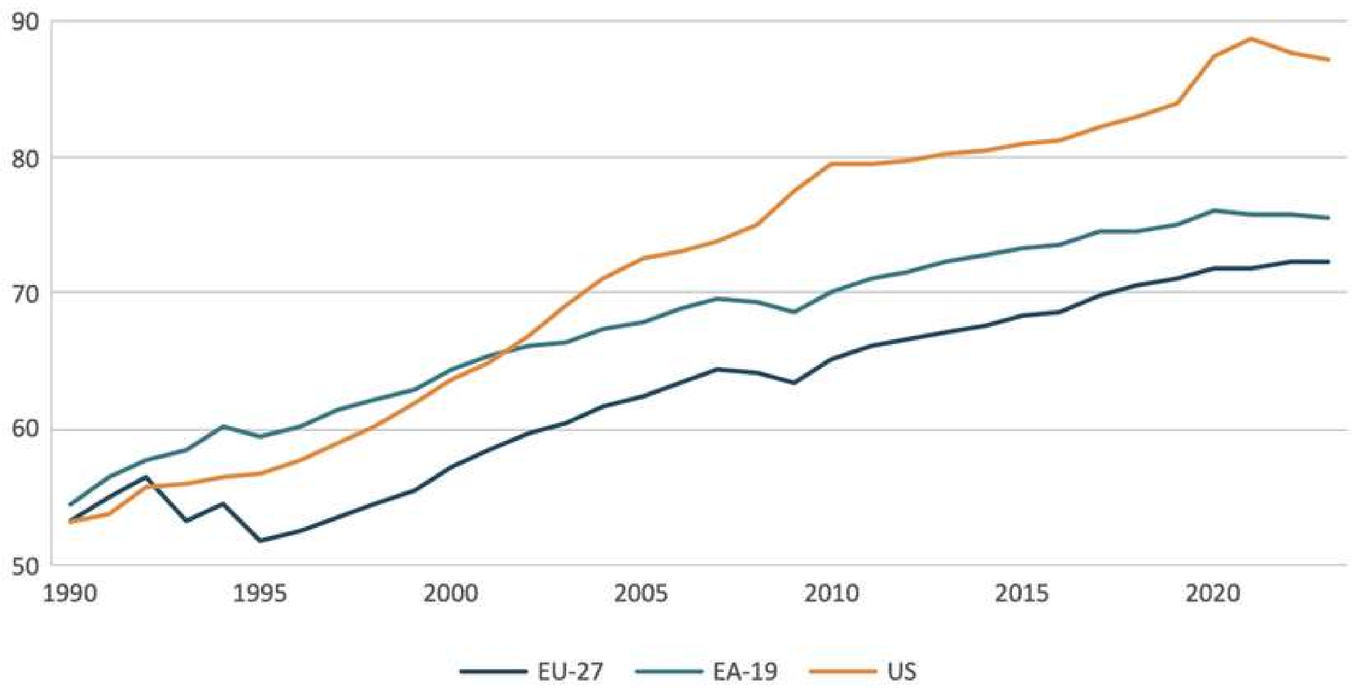
Demarais, Agathe (2024): "It just makes cents: Why the EU needs to step up its geoeconomics game" https://ecfr.eu/article/it-just-makes-cents-why-the-eu-needs-to-step-up-its-geoeconomics-game/

15. Per què la productivitat europea no segueix el ritme de l'americana?

"For decades, the EU's productivity growth has consistently lagged the United States, leading to slower growth in living standards and decline in global economic power."

"Four major forces fuel this productivity divide. Firstly, the EU's investment in research and development (R&D) pales in comparison to the U.S., leading to fewer patents and a slower pace of technology-fuelled innovation. Secondly, Europe trails America in the stock and growth of intangible capital investments, which are crucial for adopting and diffusing new technologies that drive productivity. Thirdly, the EU market exhibits slower business creation and destruction compared to the US. This rigidity hinders the flow of resources towards the most productive firms. Lastly, despite boasting higher levels of trade openness, the EU attracts less Foreign Direct Investment (FDI) than the US, curbing its access to cutting-edge global technologies and expertise."

"To close the gap, European policymakers should implement a comprehensive strategy for faster productivity growth. The first step is turning up the dial on R&D spending, targeting 4-5 percent of GDP by 2040. Next, Europe should prioritise investments in intangible assets and lay down the digital infrastructure that will underpin future growth. Revitalising the single market is also crucial: reducing internal and external market barriers for services, the primary vehicle for trading intangible assets. Moreover, the EU should foster a market environment that encourages entrepreneurship and facilitate the entry and exit of firms so resources cascade towards the most productive sectors."



EU and US GDP per hour worked (2022 international dollars, PPP)

EA-19 = Belgium, Germany, Ireland, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Greece, Slovenia, Cyprus, Malta, Slovakia, Estonia, Latvia, Lithuania

"The Letta report, published in mid-April 2024, identified a lack of integration within the EU's single market as a key obstacle to European growth."

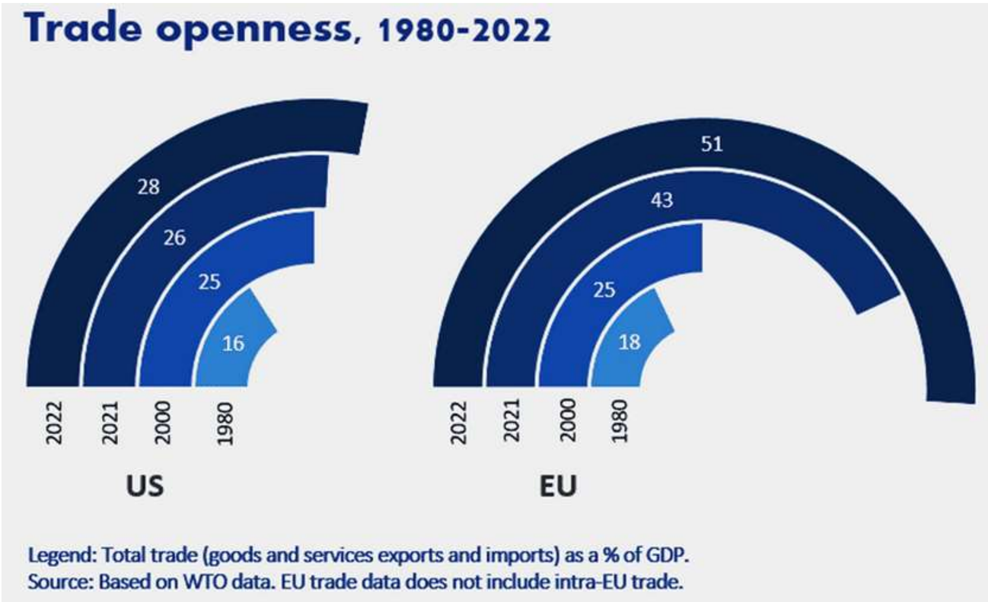
"Europe's economic challenge is not about working longer hours or taking shorter holidays but improving the amount of value-added generated by the inputs to the economy. Arguably, enhancing competitiveness essentially means boosting economic productivity: higher productivity means that business can draw on more efficient production and better compete globally. Therefore, any discussion on charting a corrective course on EU's declining competitiveness requires a focus on productivity."

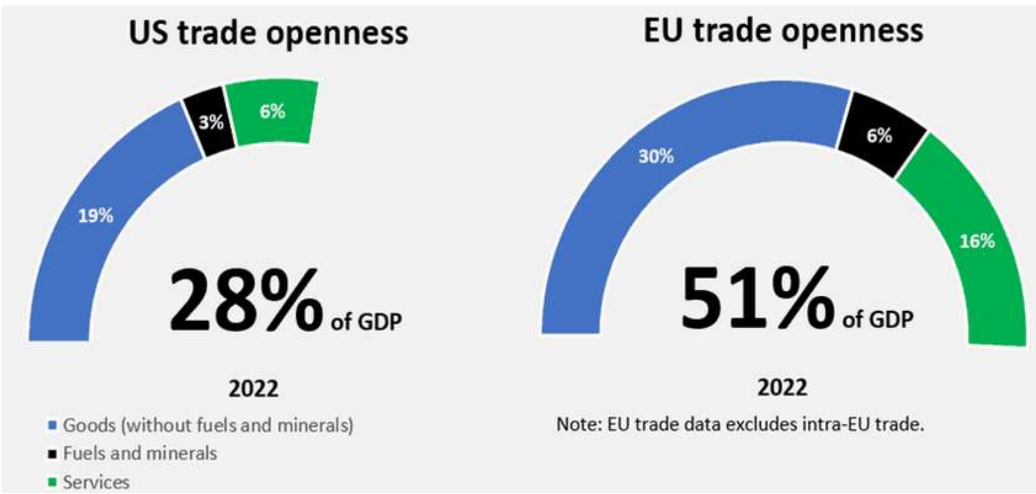
Erixon, Fredrik; Oscar Guinea; Oscar du Roy (2024): "Keeping Up with the US: Why Europe's Productivity Is Falling Behind"
https://ecipe.org/publications/keeping-up-with-the-us-why-europes-productivity-is-falling-behind/

16. Importància de l'obertura comercial

"Competitiveness concerns are back to the fore. The FT [Financial Times] has recently warned that Europe faces a 'competitiveness crisis', especially when compared to the United States, where productivity growth is projected to remain higher than in Europe for years to come… Germany, the main economic engine for the European Union is slowing down."

"When overall economic activity slows down, that has an impact on overall trade activity as well. And when productivity lags behind those of other trading partners, one can only expect dim prospects for trade performance … Other clouds on the trade horizon: wars, geopolitical tensions, the Red Sea disruptions, the fragmentation of global supply chains, and the list could go on. The WTO data indicates that the volume of world merchandise trade fell by 0.4% in the third quarter of 2023, compared to the previous quarter and was down 2.5%, compared to the same period in 2022. The latest UNCTAD Global Trade Update estimated a negative growth rate in global trade value, with a 3% overall decline.





Trade openness = ratio of total trade in goods and services over GDP

"The US trade openness has seen a steady but small increase over time, reaching in 2022 28% of GDP. In contrast, the EU trade openness increased spectacularly in recent years and in 2022 stood at 51% of GDP… Switzerland's trade openness ratio is 140% and the UK is at 70%. Even developing countries with very different trade policies and a more ambivalent attitude vis-a-vis an open trade agenda have relatively high trade openness ratios. India's trade openness, for instance, is 49%. South Africa's trade-to-GDP ratio stood at 65%."

"… the firms that engage in international trade are more productive than those that do not. That simple truth should be enough to consider trade demographics and firm-level trade statistics as part of the key performance indicators needed to monitor global competitiveness and trade policy objectives."

"… there is no right or wrong trade openness ratio. The more important conclusion is that, regardless of overall trade openness levels, transatlantic trade remains a major driver for economic growth and prosperity in the US and Europe alike. Millions of jobs for American and European workers are dependent on this strong transatlantic trade. Trade is correlated with higher productivity and higher wages."

Cernat, Lucian (2024): "On the importance of trade openness"
https://ecipe.org/blog/on-the-importance-of-trade-openness/

17. L'informe Draghi (2024) sobre la competitivitat de la UE

"Over the past two decades, income growth per capita in the EU has lagged behind that in the United States. More ominous, Europe is fundamentally unprepared to navigate a fast-changing global environment characterized by rising geopolitical tensions and rapid technological transformation. With the most open economy among the world's major powers, Europe is highly vulnerable to trade tensions and other disruptions. Complicating matters further, Europe is heavily dependent on imported energy and critical raw materials, and confronts higher energy costs than its global rivals. Access to cheap energy is vital to economic leadership. Europe also lags behind countries like the US and China on technological innovation and commercialization. In fact, the EU's presence in the tech industry is marginal, with no EU company ranking among the world's top ten tech firms by capitalization. The EU is losing its edge even in industries it once dominated, such as automobiles. The problem is not a lack of ideas; rather, Europe has struggled to translate its ideas into commercial successes."

"Economists agree that competitiveness is rooted not in trade surpluses, but in productivity, and here the EU is floundering. Europeans tout their superior social model and high quality of life. But if demographic trends and stagnant productivity persist, these advantages will soon be unaffordable … Before implementing drastic policy changes … Europeans must establish a solid political consensus on the magnitude of the problem, including a clear idea of the strengths and weaknesses of Europe's form of capitalism."

"… in the 1990s, the prevailing belief was that low productivity reflected labor-market rigidity, but making labor markets more flexible did not lead to a surge in productivity. According to Draghi, a better approach would focus on bolstering private and public investment. As it stands, however, market fragmentation (which limits scale), along with policymakers' failure to strike the right balance between tech regulation and support for innovation, is impeding private investment. Meanwhile, a failure to target the right priorities, a lack of industrial-policy tools to advance common EU objectives, and, most important, the inability to raise finance at the European level is undermining public investment."

"Draghi argues that refocusing public spending on innovation – as well as removing excessive regulations, which are impeding startups' ability to scale up – is essential to foster a Europe-wide innovation ecosystem. He does not shy away from advocating subsidies and protections for innovative companies in selected industries as they establish the necessary scale to compete internationally. Draghi also pushes for the establishment of a unified EU energy market to lower energy costs. He encourages a pragmatic approach to trade with China, with rules tailored to different sectors and technologies. And he recommends the development of an EU 'foreign economic policy,' including preferential trade agreements with friendly partners."

"… he is not suggesting that the EU should 'pick winners' or calling for blanket protectionism… One of the report's most important … messages is that protecting the single market requires tools that are designed and implemented at the EU level. Another is that, without a deep and liquid market for EU debt, the creation of a European safe asset – crucial to raise financing for public goods – will be impossible, and the capital markets union … will never develop. Ultimately, Draghi's report calls for Europe to build something like a war economy and run it hot, using common firepower. But developing a single approach to innovation, energy, defense, industrial policy, and common financing tools will be no easy feat … The EU is not a federation, and economic nationalism has generally prevailed, preventing cross-border mergers, limiting coordination, and impeding common financing. Today, the common EU budget amounts to just 1% of the bloc's GDP, and the common debt issued in response to the COVID-19 pandemic was temporary by design."

Reichlin, Lucrezia (2024): "Will the EU Heed Draghi's Call for Integration?"
https://www.project-syndicate.org/commentary/will-the-eu-implement-proposals-in-mario-draghi-report-on-competitiveness-by-lucrezia-reichlin-2024-09

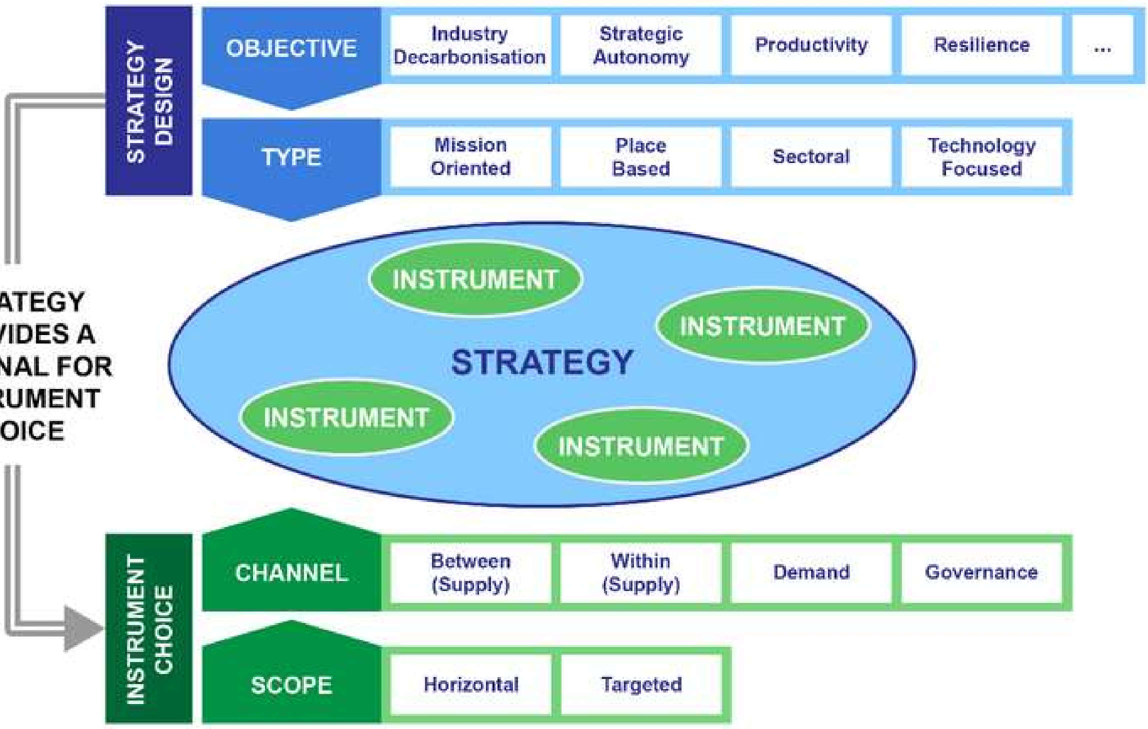
18. Marc conceptual de la política industrial

"Industrial policy is back after having been considered a taboo since the 1970s. Until recently, government failures and industry capture were seen as worse enemies than market failures. But ever since the global financial crisis, governments have relied on industrial policy to stimulate growth and productivity, promote resilience, and address societal challenges. Now industrial policy is taking center stage as countries seek to ensure a green, digital, and inclusive recovery after the Covid-19 pandemic, and to reduce dependencies on critical inputs following recent shortages and Russia's invasion of Ukraine."

"Virtually every government uses industrial policies, but do they really work? This question will not be answered satisfactorily anytime soon."

"First, there is no agreement on which interventions are considered 'industrial policy.' Second … we do not really know how (and how much) governments are really spending on industrial policies. Third, the evidence on the effectiveness of single industrial policy tools, let alone entire industrial strategies, is mixed and not always convincing. Targeted policies that focus more narrowly on firms with certain features (e.g., size, age, location) or in specific industries continue to raise concerns related to anticompetitive effects, capture by vested interests, and the opportunity cost of public funds. And no consensus exists on the efficiency of more general industrial policies (known as horizontal or untargeted), and even less on their sufficiency to address global challenges like, for example, climate change."

"We define industrial policy as the set of 'interventions intended to improve structurally the performance of the domestic business sector' and thus cover instruments ranging from the design of intellectual property protection to public procurement, R&D incentives, or public support to improve workers' skills. It also encompasses much-studied realms such as science, technology, and innovation and entrepreneurship policies."

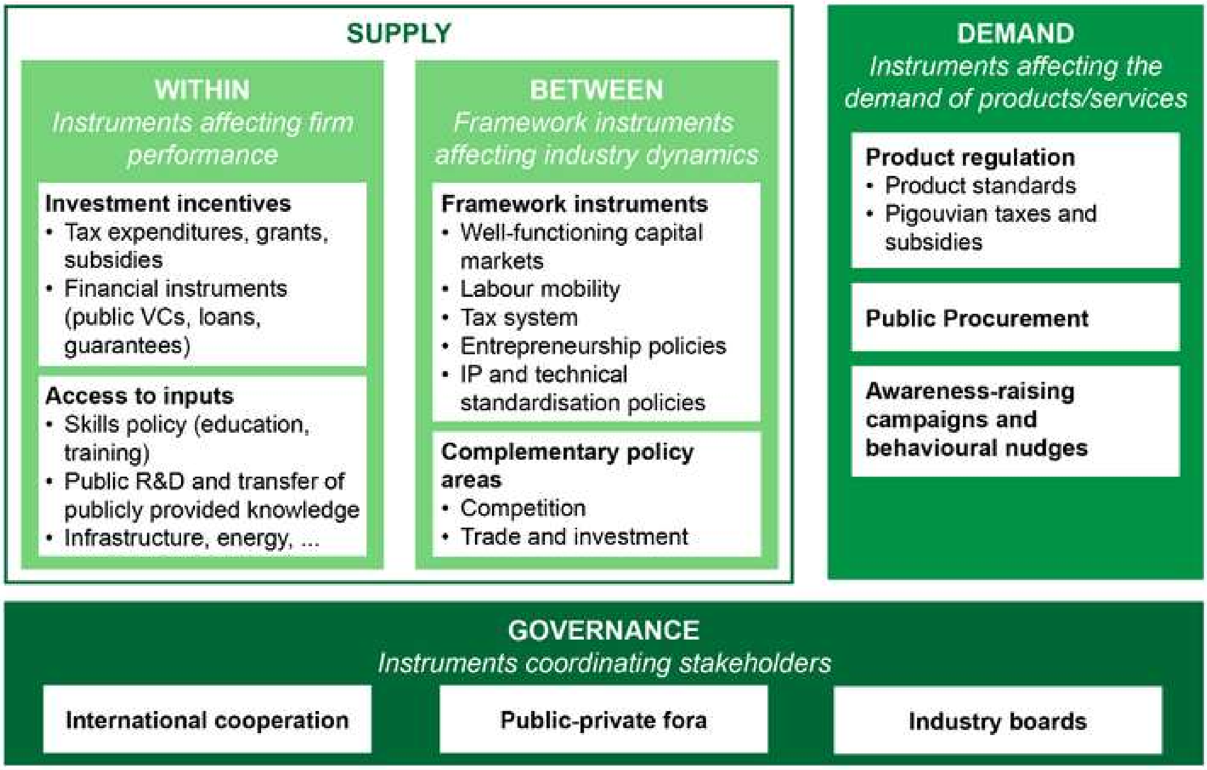


The formulation of industrial policy

"Our conceptual framework highlights two main dimensions of the formulation of industrial strategies, which are linked by the rationale underpinning policy intervention: designing an industrial strategy and selecting policy instruments to execute that strategy.

The design of industrial strategies: A strategy is a consistent and articulated group of measures aimed at achieving a given policy objective, which can go beyond productivity growth and innovation to include things like sustainability, resilience, and strategic autonomy. Beyond traditional sectoral or place-based orientations, 'new' industrial strategies increasingly focus on specific technologies or 'missions'. For instance, mission-oriented industrial strategies are primarily motivated by the societal benefits they can provide and the need to coordinate multiple stakeholders around complex challenges, such as the green transition.

The choice of industrial policy instruments: Our taxonomy identifies the channels through which policy instruments operate and potential complementarities. In addition to keeping with the traditional distinction between horizontal and targeted policies, the taxonomy distinguishes between demand-side instruments and two types of supply-side instruments: those that primarily improve firm performance (such as tax credits, grants, loans or loan guarantees, and public support for training within firms) and those that affect industry dynamics ('framework' instruments such as the tax system, capital and labor market policies, competition or trade policies).



Taxonomy of policy instruments

"This framework can shed light on the design of industrial strategies for the green transition, for example, by helping understand the complementarities between innovation and technology adoption support on the one hand and demand-side instruments on the other hand. The latter can contribute to transformative industrial change by affecting the demand for products through either their price, availability, or public demand, and have become more and more common, in particular in transformative mission-oriented strategies. The underlying rationale is the creation of demand to support scaling-up and in turn lowering costs through learning by doing. In the context of targeted industrial strategies, demand side policies are particularly interesting as they may be less distortive than targeted supply-side policies."

"Sound policymaking requires having a helicopter view of industrial policy — policymakers need to know what their government is doing domestically as well as understand partner countries' policies."

"The review of existing empirical evidence clearly supports the premise that well-designed economic incentives for firms and good framework conditions are effective. First, among the different types of economic incentives, the most studied by far are R&D tax credits and subsidies. While it has long been recognised that they stimulate R&D expenditures, recent studies also show that they tend to increase innovation. Second, policies leveling the playing field and ensuring an efficient allocation of resources, such as sound competition and trade policies, lowering barriers to entry, and cutting red tape, are key complements to industrial policy in enabling the most productive firms to grow and an important channel for structural change."

Criscuolo, Chiara; Guy Lalanne (2023): "A New Framework for Better Industrial Policies"
https://www.promarket.org/2023/01/17/a-new-framework-for-better-industrial-policies/

19. Característiques bàsiques de la política industrial moderna

"First, IP [Industrial policy] is common (25% of policies in our database) and has expanded since 2010. Second, instead of blunt tariffs, IP is granular and technocratic. Countries tend to use subsidies and export promotion measures, often targeted at individual firms. Third, the countries engaged most in IP tend to be wealthier (top income quintile) liberal democracies. In our data, IP is rarer among the poorest nations (bottom quintile). Fourth, IP is targeted toward a subset of industries and is highly correlated with an industry's revealed comparative advantage. Our approach to measuring industrial policy shows that contemporary practice is likely much different from the past."

Juhász, Réka; Nathan Lane; Emily Oehlsen; Verónica C. Pérez (2023): "The Who, What, When, and How of Industrial Policy: A Text-Based Approach"
https://steg.cepr.org/publications/who-what-when-and-how-industrial-policy-text-based-approach

20. Política industrial: Japó versus EUA

"From the vantage of traditional economics, Japan has made very serious policy errors. It has, for example, protected its domestic economy against foreign competition and intervened in specific industrial sectors and in the affairs of particular firms. Perhaps its capacities and resources have been so great that it has succeeded despite its policy errors. Or perhaps, as this book suggests, traditional American economic and political conceptions about the dynamics of international trade and domestic development are flawed and must be reconsidered in view of Japan's spectacular development success."

"From low-wage, labor-intensive apparel through shipbuilding, steel, and automobiles to technology-intensive semiconductors, Japanese industry has established positions in the U. S. and world markets. More troubling, in those same sectors, American firms have lost market share at home and abroad."

"As Japan reaches industrial maturity in a broad range of industries, its government is exerting substantial efforts to build a Japanese position in advancing technologies. Agencies such as the Ministry of Trade and Industry (MITI) … are involved. So, also, are less well-known agencies such as the Science and Technology Agency and the Ministry of Health."

"For the first twenty-five years of the postwar period, America was indeed a hegemon. It had the capacity to shape the international system, forcing others to play by its rules. Its domestic economy was little affected by economic policy choices abroad Interdependence was for others; the United States was at the center of the system. America's capacity to ignore international pressures, its place as a hegemon, ended with the floating of the dollar in 1971. We had to change the international rules to accommodate our own domestic needs."

"In the years since 1971, the international position of the American economy has sharply eroded. America's ability to impose its preferences in the face of opposition from the other advanced countries has weakened. America no longer dominates the international economy."

"The shifting patterns of trade and the emergence of new lines of technological development force new tasks on the United States … The purposive and successful domestic as well as trade strategies of our competitors will force the United States to adjust. We are discovering that there are different ways of organizing capitalism … America's economic and political institutions have evolved in the twentieth century in a manner that suits its once dominant position, not in a manner that suits the increasingly competitive international environment."

"We cannot respond to our problems unless we can identify them. The Japanese success and the emergence of new forms of industrial organization and manufacturing pose an important intellectual challenge … There have been many efforts to examine the patterns of growth in Japan to demonstrate that state influence has been less important than generally understood or has been counterproductive. There have been attempts to show that Japan's policies of import substitution and protection targeted at specific industries did not matter or did not work. Such efforts try to reshape the case to fit the theory."

"… although Japan is an advanced capitalist democracy, the institutions of capitalism that it has built in the context of its unique experience with industrialization differ fundamentally from those encountered in American capitalism. In the Japanese variant of capitalism, markets are emphasized as a source of growth rather than of short-run efficiency, and a primary role of government is to supply incentives to promote growth through markets. The perspective motivating Japanese policy is explicitly dynamic and explicitly developmental. From this perspective, the competitive advantage of a nation's producers in world markets is created by policy rather than given by immutable resource and technological endowments. Moreover, in a dynamic world, temporary policies to create competitive advantage for domestic producers can have long-term effects that are difficult to reverse."

Tyson, Laura d'Andrea; John Zysman (1989): "Preface. The argument outlined", a Johnson, Chalmers; Laura d'Andrea Tyson; John Zysman; eds. (1989): *Politics and productivity. The real story of why Japan works*, HarperBusiness.

21. Desenvolupament = govern + emprenedors

"Everything this book presents is—or at least was—well and widely known. Recently, however, much seems to have been forgotten. So this book tries … to remind us … how the American economy, again and again, was reshaped and reinvigorated by a loveless interplay of government making broad economic policy and entrepreneurs seeking business opportunities."

"This book … is about government and entrepreneurship. But it will not rehash the sturdy and well-known arguments that, to thrive, an entrepreneurial economy needs an environment characterized by a broad range of freedoms, protections, and incentives … We are here to talk about the other important interplay of government and entrepreneurship … Repeatedly, government in the United States opened a new economic space, doing what was needed to enable and encourage entrepreneurs to rush into that space, innovate, expand it and, over time, reshape the economy. Each time, and there were many, this was done pragmatically."

"From a global, bird's-eye view, three centuries ago the world's high civilizations were roughly equal in prosperity. Today the North Atlantic nations (including a few 'honorary' North Atlantic countries like Japan and Australia) are richer by a factor of at least five. And the overwhelming bulk of that divergence is due to economic policy. The post–World War II reinvigoration of Western Europe, the post-1975 rise of China, and the post-1913 relative economic decline of Argentina were, no serious thinkers dispute, predominantly driven by good and bad economic policy."

"That policy matters most is clear from this global record. In successful economies, economic policy has focused on what works for people who are trying to increase productivity on the ground, not on the voices heard by madmen in authority or the doctrines of academic scribblers. That is the lesson we draw from our reading of economic history. Getting … economic policy right is and has been of overwhelming importance in generating prosperity. But a global, bird's-eye view cannot provide us with enough detail to understand how, exactly, or what "getting the economic policy right" really means. For that, we have to focus. And so this book will focus on the United States, which is … the place where economic policy has been, without a doubt, the most successful over the past couple of centuries."

"When we look at the United States, we find not one design of economic policy, but rather sequential redesigns as the economic environment and the policies that offer the best chance of successful medium-term growth shift. Beginning with Alexander Hamilton, the architect of the first and most important redesign, and moving on to Abraham Lincoln and the Republican ascendancy, to Teddy Roosevelt, Franklin Roosevelt, and Dwight Eisenhower, the US government is always there, taking the lead, opening new economic spaces. It is doing so consciously. And it is doing so pragmatically—not ideologically. And it is doing so very successfully, at least until recently."

Cohen, Stephen S.; J. Bradford De Long (2016): *Concrete economics. The Hamilton approach to economic growth and policy*, Harvard Business Review Press.

22. El dilema entre lliure mercat nacional i lliure mercat internacional

"Economic reality was in the process of disproving decades of economic theory. America was about to lose millions of jobs to the 'China Shock' of cheap imports flooding the domestic market; those labor resources could not quickly shift to other jobs… Production did not shift quickly to other goods for domestic consumption: industrial production rose 94% from 1980 to 2000, but only 7% from 2000 to 2020; excluding the notoriously mismeasured production of semiconductors, American industrial output in the 21st century has declined by 10%."

"Globalization was supposed to supercharge growth, which instead slowed. Productivity growth stalled … Business investment fell to the lowest share of GDP on record and financial markets withdrew trillions from the productive economy. America lost its ability to make the world's fastest computer chips or jetliners that would safely fly. Rather than transition to well-paying 'jobs of the future,' America's labor market produced jobs requiring a college degree only half as fast as it added college graduates. For the vast majority of Americans, working in jobs that did not require a degree, wages stagnated."

"The entire edifice of globalization—the case for the unfettered flow of goods, people, and capital across borders—was built upon the firm faith that more of these things was always better."

"According to this model, as economists had been taught and now themselves taught, free trade was and would always be America's optimal strategy. If China wanted to steal our intellectual property, manipulate its currency, subsidize state-owned enterprises, and sell us the results for cheap, they were the suckers and we should just enjoy all the stuff. If China took back our financial assets instead of our exports, accepting IOUs in return for sending us products we might once have made ourselves, all the better."

"Capitalism does not work because people with capital, left to their own devices to maximize profits, will behave in ways that deliver widespread prosperity. That's nonsensical and has not a shred of evidence to support it. Nor is 'capitalism' a synonym for 'economic freedom' … Capitalism works because, under a specific set of conditions in a well-governed market, capitalists need increasingly productive workers to achieve increasing profits, and workers need access to capital to achieve increasing wages, and in their mutual dependence both find it in their interest to act in ways that deliver good outcomes for themselves and for consumers as well. Capitalism locks everyone in a room together and encourages them to find a way out."

"This system of mutual dependence between capital and labor, not mere 'economic freedom,' is what Adam Smith so ably described. Globalization destroys it, instead urging the owners of mobile capital to forsake the interests of their fellow citizens and search for higher profits through labor arbitrage abroad. A democratic republic's vast working and middle classes will rightly reject such an arrangement, forcing elites to choose between restoring capitalism by constraining capital or entrenching their own economic prerogatives by subordinating the democratic process. That's as good a description as any of the precipice at which America now stands."

"Smith and Ricardo … were brilliant analysts who understood that economic principles were contingent on social conditions, and who carefully enumerated the conditions relevant to their analysis … It is a particular testament to their intellect that they nonetheless anticipated and disclaimed a feature of our modern economy: the free flow of capital. Their theories applied, they both insisted, only so long as a nation's capitalists invested within its own borders."

"Start with Smith and his famous 'invisible hand' … The metaphor stands today for the idea that market forces ensure people pursuing their own profit behave in ways that benefit society broadly. It is 'the hand of free commerce that brings magic order and harmony to our lives,' in the words of libertarian author Amity Shlaes. That's not what Smith meant. For all its quotation, the phrase appears only once in the two volumes of The Wealth of Nations (1776)… 'By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention.'

"They don't teach all that … To the contrary … the leading economics textbook of the 20th century edited most of it out. In Economics, Nobel laureates Paul Samuelson and William Nordhaus reprinted the quote as, 'He intends only his own security, only his own gain. And he is in this led by an invisible hand to promote an end which was no part of his intention.'"

"Smith's actual theory assigned enormous caveats to the idea that capitalists pursuing their own interests will behave in ways beneficial to the broader society … Smith's argument for an alignment of self-interest with the public interest is a logical deduction built upon clearly stated preconditions. If a capitalist wishes to deploy his capital domestically, and if the domestic investment that will generate the most profit for him is also the one that will create the most value and employ the most people in his country, then we will have a well-functioning capitalist system."

"Modern economists cite fondly the seminal example … which described England trading cloth to Portugal for wine. The trade will be beneficial to both sides, Ricardo showed, even if Portugal can produce both cloth and wine more cheaply. This idea of 'comparative advantage,' suggested Paul Samuelson … is the only principle of the social sciences that is both true and nontrivial."

"But like Smith, Ricardo saw that his model required capital to be constrained. His example only works … because of 'the difficulty with which capital moves from one country to another.' Where Portugal is the low-cost producer of both, 'it would undoubtedly be advantageous to the capitalists of England and to the consumers in both countries, that under such circumstances, the wine and the cloth should both be made in Portugal, and therefore that the capital and labour of England employed in making cloth, should be removed to Portugal for that purpose.' Echoing Smith, he noted that this does not happen in practice because, 'the fancied or real insecurity of capital, when not under the immediate control of its owner, together with the natural disinclination which every man has to quit the country of his birth and connexions, and intrust himself with all his habits fixed, to a strange government and new laws, checks the immigration of capital.'"

"Smith and Ricardo stated their propositions in terms incompatible with modern globalization. Both assumed that capital would remain in the domestic market. And as a corollary, both conceived of trade as occurring only on the basis of goods for goods."

"To march confidently forward with modern globalization on the basis of Smith and Ricardo is an act of spectacular hubris, equivalent to consulting a treatise on flight that describes how objects can defy gravity if an engine delivers sufficient thrust and an airfoil delivers sufficient lift, then wantonly shoving passengers off a cliff in metal boxes. At least, in that case, most people would stop after the first few bodies piled up. Our economists wave their manuals and shout, 'Congratulations, you're flying!'"

"Rather than recognize that a particular set of conditions had supported the desirable outcomes, economists concluded that markets delivered such outcomes automatically—that with greater globalization would always come greater benefits."

"The rationale for capitalism has never been that by maximizing the profits paid to investors, society will prosper. Its rationale is that in trying to maximize their profits under certain conditions, investors will behave in ways that do generate prosperity … Smith saw high profits as inversely correlated with the public interest."

"We can as easily tell this alternative story about our Ohio investor: He invests in Shenzhen instead of Ohio, reinvests his profits into other foreign operations or uses various legal mechanisms to avoid the taxation that would accompany a realization of his capital gains, and ultimately hands his money over to a hedge fund that speculates in options markets. He never consumes or invests a dime more in Ohio than he would have as owner of a local factory—though he may finance a foreign factory that bankrupts a local one. He … dying a wealthy man, leaves enormous sums to reputable foundations that provide addiction treatment and housing assistance to the underemployed residents of his home city. He also leaves a tidy sum to a prominent think tank, endowing a chair in international capitalism, whose holder delivers an annual speech on the ways open markets help Americans economically … Does this alternative story about our Ohio investor seem more or less likely than the one where he becomes an avid sofa connoisseur, boosting local employment for furniture salesmen? Economic theory cannot answer the question definitively."

"What economic theory can tell us is that, insofar as the Ohio investor does reallocate his capital to Shenzhen, America is worse off than had he chosen the best option available in Ohio. That the investor might earn a lower return domestically is simply not of much concern to the people of his community, who would have a local employer offering well-paying jobs and supporting a broader ecosystem of suppliers and customers."

"The process innovations by which capitalists find ways to produce more output with less labor are the sine qua non of economic progress and a great force for good in the domestic economy. They differ from globalization's substitution of foreign labor for domestic in two vital respects. First, they tend to occur gradually and to boost output more rapidly than they reduce labor. In the manufacturing sector, for instance, productivity growth from 1947 to 2000 averaged more than 3% annually—that is, producers halved the labor needed for the same level of output every 20 years or so. Yet manufacturing employment grew by millions. Only since 2000, when similar or slower productivity growth was accompanied by stagnant or declining output, has employment collapsed. Second, even when process innovation does reduce employment, the result is a still-healthy and typically growing local enterprise, offering higher-paying jobs for some that can in turn help to support other enterprises and employment in the community. That's hardly comparable to shuttering a business, or failing to start one in the first place."

"Domestic competition moves employment opportunities to a new firm, or perhaps even a new location or occupation. But in this circumstance, declining labor demand in one place bears a hydraulic relationship to increasing labor demand in another. Typically, some firms in a given region will be winning while others are losing, which buffers the net impact on local economies. Long-term net flows of capital from one region to another will tend to occur on the same timescale as domestic migration. Areas with relatively looser labor markets become more attractive sites for subsequent investment. None of this holds true when regions separated by 7,000 miles of ocean, a century of economic development, and incompatible political systems find themselves in a common market."

"The prosperity-creating cycle of creative destruction requires entrepreneurs working in parallel both to render labor less necessary in some places and find new uses for it in others."

"If we want capitalism to deliver broad-based, rising prosperity in America, then we must have a well-theorized understanding of the conditions under which it will succeed. A model focused on ensuring that wealthy people can earn the greatest possible return on their capital is not capitalism; it's oligarchy, and its track record is quite poor. Capitalism works for capital, labor, and consumers when all are indispensable to each other's goals and each gains from their achievement. Interdependence is what translates the pursuit of private profit into public benefit. An indispensable element for maintaining this interdependence is the bounding of the market, so that the various economic actors have no alternative to each other … By contrast, globalization and its underlying theory make the goal a boundless market, in which borders have as little relevance as possible to economic transactions."

"A bounded market is not an isolated one; goods and services, capital, and people can enter and exit. But their flows are controlled, and for a well-functioning capitalist system the principle of control is balance. Through restrictions on trade or capital flows, public policy can force imports and exports into balance, so that goods and services are exchanged for each other rather than for financial instruments. … Balance imposes the necessary interdependence on labor and capital while also allowing for the actual benefits of trade that Smith and Ricardo described."

"Choosing a free but bounded domestic market over globalization implies neither 'central planning' nor a 'closed economy.' A great benefit of defining clear boundaries for the market and then deferring to private-sector competition therein is that this strategy requires far less state intervention than with the enormous demands placed on bureaucracies to make globalization work."

"Competition policy, investment policy, labor policy, and financial regulation, for example, all play roles as well in creating the conditions in which the invisible hand leads the individual "to employ his capital in the manner in which it is likely to afford the greatest support to domestic industry, and to give revenue and employment to the greatest number of people of his own country." Greater returns must not be available through the pursuit of monopoly rents or financial speculation. Incentives must exist to reward innovation and expansion that generates a high ratio of public to private returns. Workers must possess sufficient power in the labor market to advance their interests. Globalization makes all this much harder, while a bounded market lessens the need for government action on these fronts."

"Even beyond the reach of the invisible hand, the bounded market advances the common good. Economic interdependence invariably strengthens the social fabric, as elites who might otherwise look outward for both peers and employees must instead look inward. Entrepreneurs would pay much greater attention to the quality of public education and the rigor of noncollege pathways—as economic imperatives, not subjects of charity—if the failure of those systems meant their own failure rather than an excuse to hire foreigners instead."

"… markets tend toward convergence, so their borders should be drawn around areas within which convergence is desirable. Insofar as the nation recognizes itself as a community, it can support convergence that lifts up those least well off. Insofar as citizens face few linguistic, cultural, and legal barriers to internal migration—at least as compared to emigration—their potential mobility more closely matches that of capital and offers a release valve for economic pressure … In the era of globalization, convergence within America has stalled and even reversed, replaced by a convergence between the United States as a whole and the much poorer nations of the developing world."

“The irony of the relentless push for globalization by the most passionate free-marketeers is that, in the process, they have grievously wounded the free market they prize above all else. The elimination of trade and capital barriers between China and the United States has imported not just cheap Chinese goods but also Chinese distortions and abuses. The investment decisions of American corporations now turn on the machinations of authoritarian communists. Every consumer shops in a market rife with forced labor … As the fortunes of a narrow set of ‘winners’ diverge further from the broader base of ‘losers,’ more redistribution is required to fulfill the empty promise of a larger economic pie.”

“Globalization’s internal contradictions mean that, far from optimizing capitalism, it has left capitalists with a thorny dilemma: Free trade or a free market, choose one. The correct choice is a free market in which domestic capital must make use of domestic labor to serve domestic consumers. Unlike globalization, that is a formula for broad-based prosperity.”

Cass, Oren (2022): “Searching for Capitalism in the Wreckage of Globalization”
https://americancompass.org/searching-for-capitalism-in-the-wreckage-of-globalization/