



FLINT

Digital services and SME productivity in the EU

Evidence from
Amazon services

March 2026



Surjinder Johal (Director)

Surjinder brings over two decades of experience from the UK's Office for Budget Responsibility and HM Revenue & Customs. He advises clients across sectors through robust economic modelling and fiscal analysis, combining deep analytical expertise with practical insight into how modelling supports sound decision-making.

Andy King (Specialist Partner)

Andy leads Flint's economic modelling and analysis. Before joining Flint, he spent a decade at the UK's Office for Budget Responsibility producing the UK's official economic and fiscal forecasts. That followed several senior roles at HM Treasury. He brings extensive experience in translating economic evidence into policy insight.

Economic Modelling at Flint



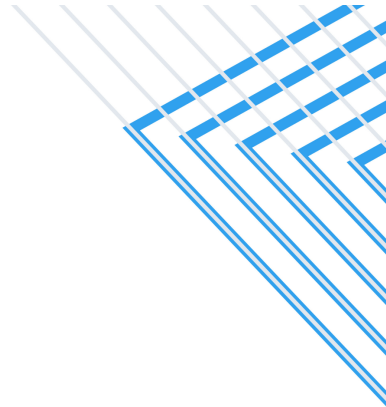
Flint's economic modelling team applies rigorous analytical methods to help clients understand complex markets, assess policy options, and quantify the impacts of strategic and regulatory decisions.



Our economists draw on deep public-sector experience at the Office for Budget Responsibility, HM Treasury, HM Revenue & Customs and several regulators, combining technical precision with practical insight into how governments and businesses make decisions.



We design models tailored to client needs - from scenario and risk analysis to full macroeconomic and sectoral impact assessments - delivering clear, evidence-based insights to inform strategy and investment.



DISCLAIMER

This report has been prepared by Flint Global for Amazon. All information in this report is derived or estimated by Flint Global analysis using publicly available information and surveys conducted for this report. Amazon has not supplied any additional data. Information sources are referenced in footnotes throughout the report.

This report has been prepared solely for information purposes based on source references and Flint Global economic modelling. Projections, scenarios, analyses, and conclusions contained in this report should not be construed as definitive forecasts or guarantees of future performance or results.

Amazon, Flint Global and their respective affiliates, or any other third party involved make no representation or warranty as to the accuracy or completeness of the information in the report and, to the extent permitted by law, shall not be liable for any loss arising from the use of this report.



Executive Summary

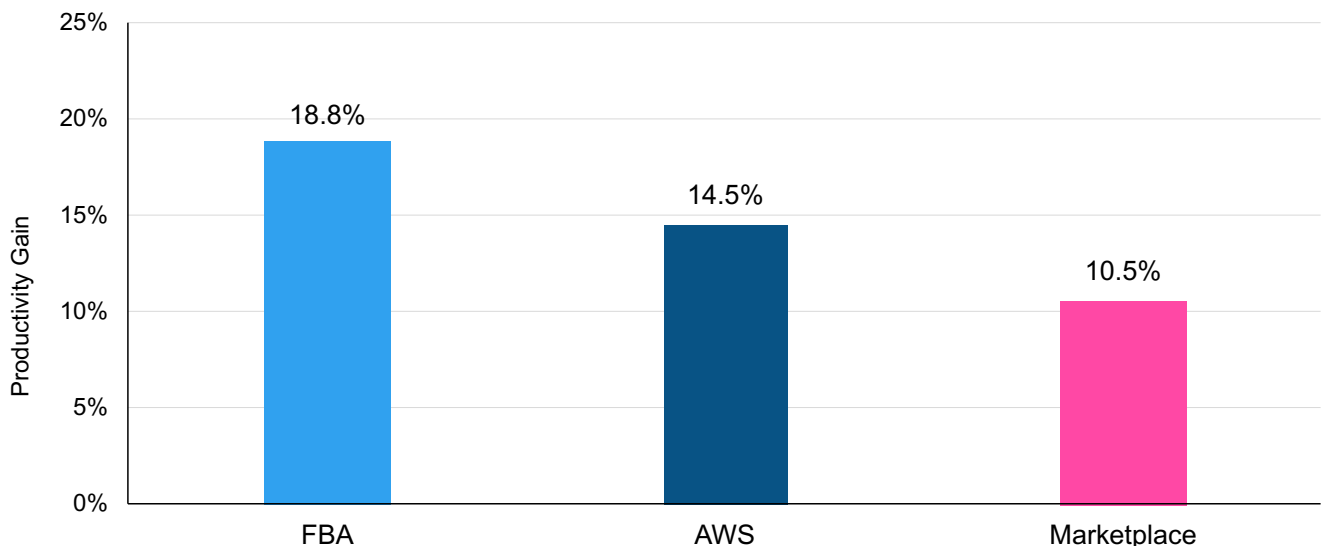
Mario Draghi's 2024 report on European competitiveness highlights the EU's long-term growth challenge, pointing to persistently weak productivity relative to the United States and other advanced economies. Around 70% of the EU-US per capita GDP gap reflects lower productivity, which Draghi links in large part to Europe's slower uptake of digital technologies. SMEs are central to this challenge: they make up the bulk of firms and employment, but often face barriers to scaling and to investing in advanced technologies. Closing this gap requires accelerating adoption and diffusion of digital tools that can boost productivity.

This report examines the impact of three Amazon services – Marketplace, Fulfilment by Amazon (FBA), and Amazon Web Services (AWS) – on the productivity of European SMEs. Marketplace enables SMEs to reach millions of consumers across the EU and globally. FBA provides logistics and fulfilment support, reducing costs and freeing up resources for firms to focus on growth. AWS offers cloud infrastructure and tools that allow SMEs to access scalable, enterprise-grade digital technologies without the fixed costs of in-house provision. All offer prospects for boosting sales and reducing costs per sale.

Our analysis finds that all three services deliver clear productivity benefits. Survey evidence shows that SMEs using FBA recorded an average 18.8% productivity gain in the first year after adoption, while for those using Marketplace the gain was 10.5%. For AWS, Eurostat data on SME cloud adoption between 2014 and 2023 suggests a cumulative productivity gain of 14.5% per adopter over this period. We estimate that these translate to an additional €10bn to €20bn in gross value added for the EU economy each year.

Together, these findings demonstrate that Amazon's digital services provide meaningful productivity gains to European SMEs, helping smaller firms access new markets, reduce costs, and leverage scalable digital infrastructure.

Figure 1: Average productivity gains for users of three different Amazon services in the EU



Source: Flint Analysis.

Note: FBA and Marketplace results are derived from survey data and based on the impact on SMEs during the first year after adopting the services. AWS results are derived from economy-wide elasticities that are applied to Eurostat data on SME adoption rates between 2014 and 2023.



1. Introduction

1. Mario Draghi's 2024 report on European competitiveness highlights the EU's long-term growth challenge, which stems from persistently weak productivity that has lagged behind the US and other competitors for more than two decades.¹ Around 70% of the EU-US gap in per capita GDP reflects lower productivity, which is, according to Draghi, in large part linked to Europe's slower uptake of digital technologies and a static sectoral composition of the economy with less scope for future growth.
2. Draghi argues that raising productivity requires closing the EU's 'innovation gap' with the US and China, spreading advanced technologies more widely across the economy and allowing firms to scale within a more integrated Single Market. Technology matters because adoption and diffusion is strongly linked to productivity: in a parallel report, we show the overall economic benefits to the EU from the adoption and diffusion of external technologies is considerable – estimating that US-origin technologies alone contribute an aggregate €1.1tn (almost 6% of GDP) to the EU economy in 2025.²
3. The Draghi report also emphasises that EU firms scale up at slower rates than US firms, with Draghi attributing this to several factors, including the fragmentation of the Single Market, regulatory barriers and access to finance.³ These findings are echoed in the Commission's *State of the Digital Decade 2025* report.⁴ Many small and medium-sized enterprises (SMEs) are unable to absorb the fixed costs of investing in advanced technologies – slowing economy-wide diffusion and hindering productivity.⁵
4. This report measures adoption benefits at a firm-level, assessing the productivity gains for EU SMEs from the use of three services: Amazon Marketplace ('Marketplace'), Fulfilment by Amazon (FBA) and Amazon Web Services (AWS). The analysis of the first two uses a dedicated survey of EU SMEs to capture firm-level experiences directly. For AWS, we instead rely on data and information that is already publicly available. Figure 1 above shows that all three services provide a meaningful productivity boost to their users – ranging from 18.8% for FBA users to 14.5% for AWS users and 10.5% for Marketplace users.
5. The remainder of this report is organised as follows:
 - Section 2 describes the survey, methodology and data.
 - Section 3 discusses the adoption productivity gains from a SME perspective.
 - Section 3 presents the results, showing that all three services raise productivity for their users.
 - Section 4 concludes.

2. Survey, methodology and data

6. For SMEs, Marketplace enables them to reach millions of consumers across the EU and globally by listing and selling their products directly. FBA is a logistics service where Amazon stores, picks, packs and delivers SMEs' products, while also handling customer service and returns. AWS is a cloud service that lets SMEs access affordable, scalable computing, storage and business tools on demand, without needing heavy upfront IT investment.

¹ Draghi (2024), [The future of European competitiveness](#).

² Flint Global (2025), [The economic contribution of tech diffusion in the EU: An empirical perspective on EU-US interdependence](#).

³ Flint Global (2024), [Single Market fragmentation: Potential gains from further integration](#).

⁴ European Commission (2025), [State of the digital decade 2025](#).

⁵ In 2024, for example, Eurostat data shows that the "majority of SMEs had a low level of digitalisation" (Eurostat (2025), [Towards Digital Decade targets for Europe](#)).



7. To fill a gap in publicly available data on Marketplace and FBA, we commissioned a survey of EU users, while for AWS our modelling draws on a recent study by Katz and Jung on the contribution of cloud computing to the German economy.⁶ Both methodologies are described below.

2.1. Survey of Marketplace and FBA users

8. To estimate productivity gains from Marketplace and FBA, we surveyed 616 sellers across Germany, France, Italy, Spain, the Netherlands, and Ireland. Collectively, these six countries account for around two-thirds of the EU economy.⁷ Among respondents, 493 used Marketplace, 345 used FBA, and 222 used both Amazon services. Fieldwork was conducted in August 2025. Estimates are presented at the 95% confidence level, with a margin of error of ± 4 percentage points for the total sample.
9. The survey questionnaire was split into three sections. The first gathered demographic information about respondents' firms and screened them for eligibility, including whether they had used one or both of the two services. The second and third sections of the questionnaire collected data on turnover, labour, and other economic measures from Marketplace sellers and FBA users, respectively.
10. To correct for sampling imbalances, a weighting scheme was applied so that results accurately represent the target population of Marketplace and FBA users in the EU.⁸ We applied 'raking', an iterative algorithmic weighting method, to adjust the sample so that its marginal distributions matched the known population distributions by market and firm size.

2.2. Survey results

11. The two key metrics, in terms of measuring the impact on firms' productivity, are the impact that the use of Marketplace and FBA had on turnover and total staff time (i.e. aggregate staff hours, not time per employee). Productivity rises when turnover grows faster than staff time.
12. Before turning to the results, the underlying hypothesis being tested is that both Marketplace and FBA users would report increases in productivity, though for different reasons:
- For Marketplace users, the main driver is access to a wider customer base, which should expand sales and directly raise turnover – an output-side effect – and should do so by more than it increases staff time to fulfil those sales given economies of scale.
 - For FBA users, turnover gains are more likely to come from efficiency improvements: by outsourcing logistics, firms can reallocate resources to other activities, generating input-side benefits. The impact on total staff time is less clear in the case of FBA than Marketplace. Higher turnover would normally require additional labour, but efficiency gains from FBA should reduce the staff time required per unit of turnover, making the net effect on total staff time ambiguous.

Marketplace sellers: impact on turnover and staff time

13. Figure 2 illustrates the distribution of Marketplace sellers by change in turnover during their first year of selling through Marketplace (darker bars) and the change in total staff time spent on sales over the same period (lighter bars). The survey results show that:
- **57% of firms reported higher turnover in the year after they began selling through Marketplace**, compared with 10% that reported a decline. The majority of this group falls within the 10% to 20% increase in turnover band, though a sizeable proportion witnessed an even greater

⁶ Katz and Jung (2024), [Economic Impact of Cloud Computing in Germany](#), Telecom Advisory Services.

⁷ In GDP terms, Eurostat data shows that the six accounted for 71% of total EU GDP in 2024.

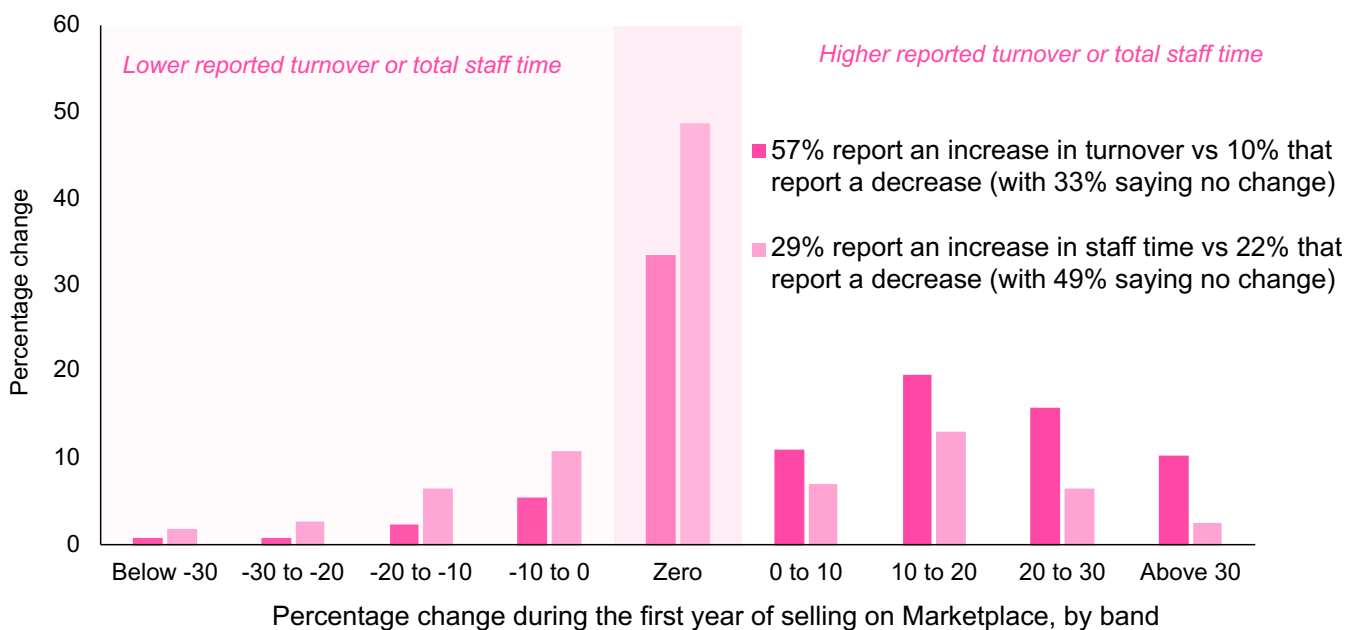
⁸ Respondents from smaller countries were intentionally oversampled to obtain more precise estimates.



rise. The average increase in turnover across all respondents and all years is 8.8%. The average of the most recent 5-year period, 2020 to 2024, is 9.0%.

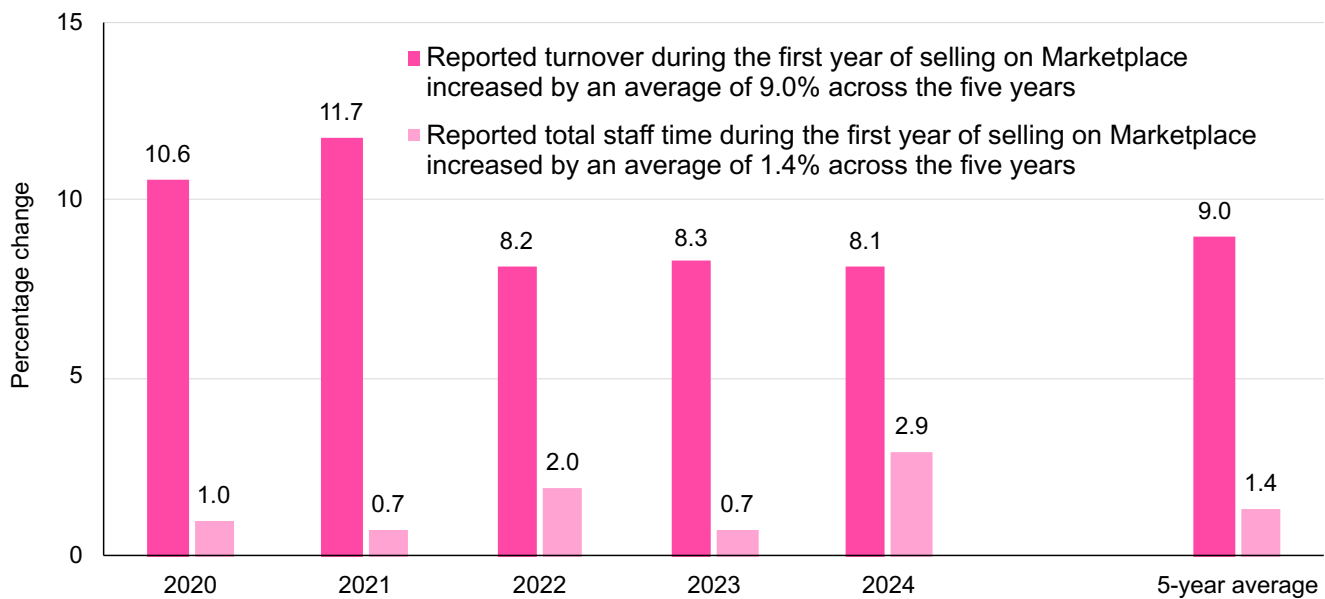
- **29% reported an increase in total staff time spent on sales**, while 22% reported a decline. Most respondents are again within the 10% to 20% increase in staff time band. The average reported increase in total staff time, across all respondents and all years, is 0.8%. For the most recent 5-year period, the average is 1.4%.
- 33% of firms saw no change in turnover, and 49% reported no change in staff time spent on sales.
- One interpretation of those reporting zero impact is that it reflects ‘very light’ Marketplace use. If we remove these respondents from the results, then the average rise in turnover increases to 13.2% and the average rise in staff time increases to 1.6%.

Figure 2: Change in turnover and total staff time for Marketplace sellers during first year of use



14. Figure 3 looks at the reported changes in turnover and total staff time over time, according to different firms' first year use of the respective services. It shows that the pattern of material increases in turnover against more modest rises in staff time in the first year of use has been stable between 2020 and 2024, though the increase in turnover for those that began their Marketplace use in the two pandemic-affected years (2020 and 2021) was higher than for more recent starters. In only one year – 2024 – has the change in total staff time deviated by more than 1 percentage point from the 5-year average.



Figure 3: First-year average turnover and staff time changes for Marketplace users, 2020–2024

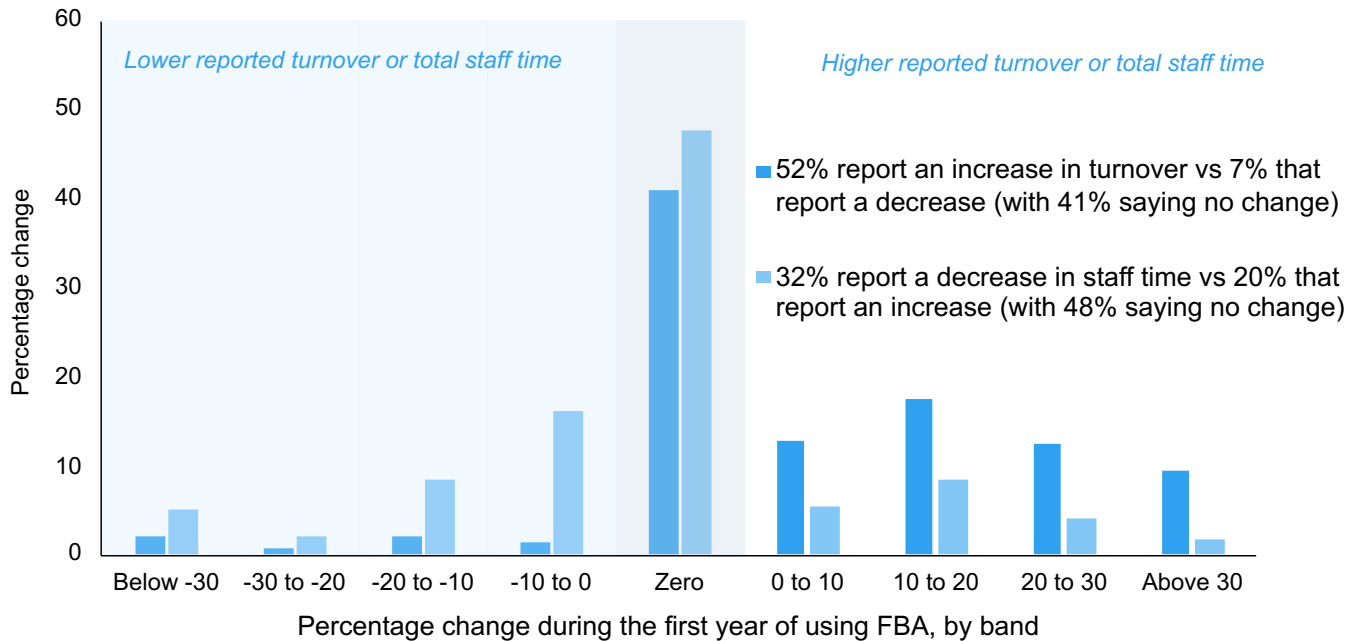
Source: Flint Analysis.

FBA users: impact on turnover and staff time

15. Figure 4 shows that the pattern for FBA users is very similar to that for Marketplace users in respect of reported changes in turnover but, consistent with the hypothesis discussed earlier, the impact on total staff time is more nuanced, with the efficiency gains in staff time *per sale* offset to some degree by additional staff time associated with increased *aggregate* sales. The results show that:

- **52% of firms experienced an increase in turnover within the first year of using FBA**, while only 7% reported a decline in turnover. Once again, most increases in turnover were in the 10% to 20% band, while a significant minority report increases greater than 20%. The average increase is 8.2%.
- 20% report an increase in total staff time spent on order processing and fulfilment, with most within the 0% to 5% band, while fully **32% reported a reduction in staff time**. This distribution of responses results in an average *decrease* in staff time of 3.1%.
- 41% of firms reported no change in turnover and 48% reported no change in total staff time.
- As discussed above, it is hard to know how many of the zeroes are due to those that sign up for FBA but then make little use of it, as opposed to it having no effect on sales or staff time despite intensive use. The average reported turnover gain, after removing these respondents, is little changed at 13.8%, while for staff time, the average decrease is greater at 5.9%.

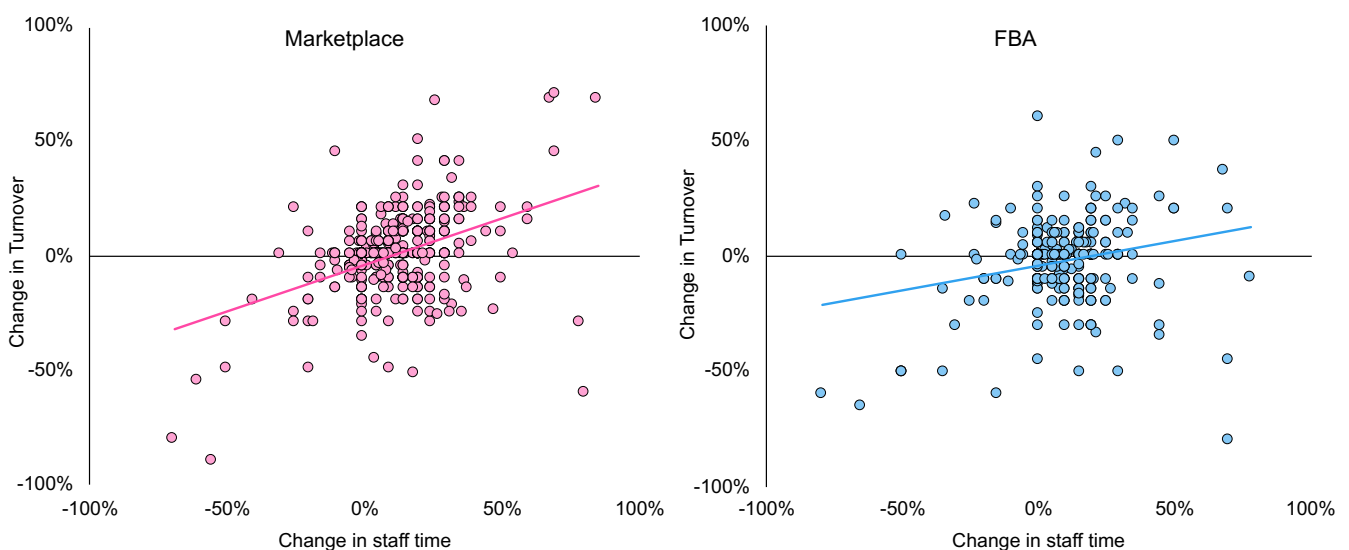


Figure 4: Distribution of FBA users by change in turnover and staff time

Source: Flint Analysis.

Correlation between changes in turnover and total staff time

16. Figure 5 plots respondents' changes in turnover against the change in total staff time for Marketplace (left panel) and FBA (right panel) respectively. Changes in turnover are positively correlated with changes in total staff time for both Marketplace and FBA, indicating that aggregate staff time increases with turnover. But, as expected, the degree to which staff time rises with sales is greater for users of Marketplace (which primarily boosts sales) than it is for users of FBA (which has a greater impact on efficiency): specifically, a 1% increase in turnover is associated with a 0.41% increase in staff time for users of Marketplace but only 0.21% for users of FBA. This suggests that use of these services lifts productivity – a firm's output typically expands by more than its labour input when it starts using them.

Figure 5: Relationship between change in turnover and staff time for Marketplace and FBA users

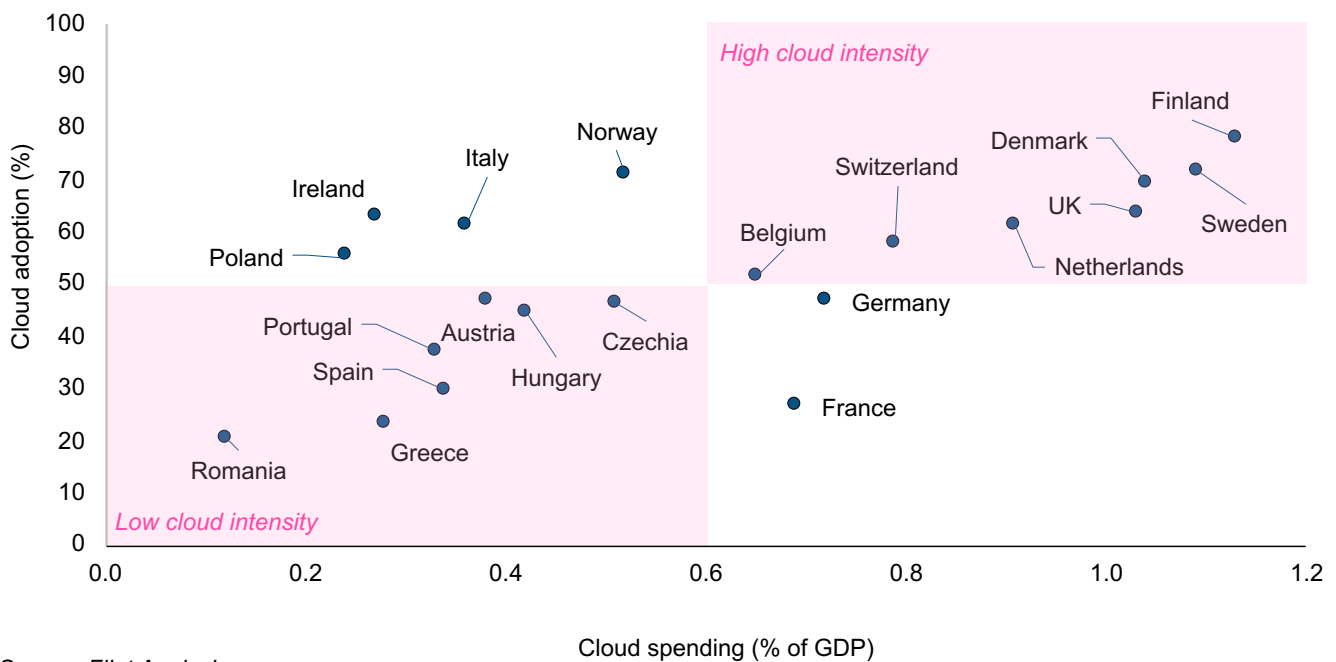
Source: Flint Analysis.



2.3. Cloud computing intensity and productivity

17. A recent study by Katz and Jung estimates that cloud computing contributed €54.7bn to the German economy in 2023, with €28.5bn of that from spillover benefits. It shows that cloud adoption – measured both in terms of firm take-up and spending intensity – is a statistically significant driver of productivity in Germany and across Europe.⁹
18. Their report estimates the productivity impact of cloud computing using a Cobb–Douglas production function. In simple terms, this framework explains economic output as the result of physical capital, labour, and technology. In their study they augment this with two additional inputs: cloud adoption and artificial intelligence (AI). Using a fixed-effects econometric regression that is applied across European countries based on Eurostat data covering 2014 to 2021, the authors are able to isolate the effect of cloud adoption from other country- or sector-specific factors, drawing on two practical indicators of cloud intensity: the proportion of firms using cloud services (capturing the breadth of adoption) and cloud spending as a percentage of GDP (capturing the depth of investment).¹⁰ Figure 6 shows the wide variation in the levels of these two measures of cloud intensity across Europe.
19. Their central finding is that a 1% increase in cloud adoption intensity is associated with a 0.145% increase in labour productivity (output per worker). In countries where AI adoption is above the median level of the sampled countries, the productivity effect of cloud is stronger, with the elasticity rising to 0.189. This indicates that cloud and AI are complementary technologies, with their combined adoption driving greater efficiency gains than the adoption of just one of them. In the next section we set out how we use these elasticities to estimate the contribution of AWS to firm-level productivity.

Figure 6: Cloud spending and adoption rates across Europe



Source: Flint Analysis.

⁹ Katz and Jung (2024), [Economic Impact of Cloud Computing in Germany](#), Telecom Advisory Services.

¹⁰ Countries include EU-27 plus UK, Norway and Switzerland.



3. Understanding SME productivity gains

20. The main focus of this report is on measuring the impact that the adoption of three Amazon services – Marketplace, FBA and AWS – has on SME productivity. In plain terms, productivity is how much output is produced for a given amount of input. The most widely used measure is ‘labour productivity’, typically defined as output per worker or per hour worked. In National Accounts this is measured as real Gross Value Added (GVA) divided by either employment or total hours worked. A narrower measure, total factor productivity (TFP), is often interpreted as technological progress, though in practice it tends to be calculated as the residual part of output not explained by measured labour and capital inputs.

Why adoption might affect SMEs differently

21. There are reasons to believe that adoption of digital services will generate greater marginal gains in productivity for SMEs than for larger firms:

- SMEs often start from a lower level of digitalisation, so adoption can deliver a step-change in capability – according to the Digital Intensity Index (DII), the majority of EU SMEs have “a low level of digitalisation, with 27% scoring a very low level of DII and 40% a low level of DII”.¹¹ For example, FBA can provide logistics efficiency gains that larger firms may already have solved internally.
- Adoption allows SMEs to access scale effects that are otherwise unavailable to them. Marketplace adoption, for instance, can open customer bases that would be much harder for a small firm to reach on its own. Likewise, AWS can give SMEs access to enterprise-grade computing resources without the need for heavy capital investment.

22. But there are counter arguments too:

- SMEs may face capability gaps that prevent them from fully realising the benefits of adoption. Larger firms are more likely to have resources for complementary investments such as staff training, digital skills, and change management.
- Larger firms can exploit economies of scale more fully. For example, they are better positioned to adopt cloud at higher intensity and integrate it deeply into data analytics, AI, and other advanced processes.

23. On balance, adoption is often more immediately transformative for SMEs than for larger firms. But without complementary investments in skills and organisational change, the longer-term gains may be more limited compared to what large firms can sustain. This interpretation is consistent with the European Commission’s Digital Decade 2030 targets, which explicitly aim for at least 75% of EU enterprises to adopt cloud, AI, or big data by 2030, with a strong emphasis on raising SME uptake.

Studies measuring technology adoption and SME productivity

24. Several large-scale studies show a robust empirical link between digital technology adoption and firm productivity:

- As noted, Katz and Jung analyse cloud computing across European economies and estimate that a 1% increase in cloud adoption intensity is associated with a 0.145% rise in labour productivity, with stronger effects in countries where AI use is more widespread.
- Similarly, an OECD working paper uses firm-level data from twenty European countries and over a million firms to show that adoption of digital technologies such as broadband, CRM systems and

¹¹ Eurostat (2025), [Towards Digital Decade targets for Europe](#).



cloud services is closely linked to faster productivity growth, particularly in manufacturing and in sectors characterised by routine tasks.¹²

- A European Central Bank study has likewise found that higher digital investment leads to measurable productivity gains at the firm level, though with a lag: gains are most apparent three to five years after adoption rather than contemporaneously.¹³

25. Together, these studies provide strong and consistent evidence that adoption of digital technologies is a key driver of productivity growth across European firms. But while they establish the aggregate relationship between adoption and productivity, they are not SME-focused. A smaller literature has examined the issue specifically for SMEs:

- Garicano and Santaló emphasise the disproportionate benefits that smaller firms can realise from digitalisation, such as the adoption of cloud services and online marketplaces, by lowering fixed costs, improving access to new customers, and enabling efficiencies that would otherwise be unattainable. They find that adoption of these services is associated with productivity gains of between 6.4% and 10.5% for EU SMEs.¹⁴
- Skare et al examine the role of digital transformation in European SMEs using the Digital Economy and Society Index (DESI). They find that SMEs undergoing digital transformation tend to report stronger market positions and activity and derive significant benefits from adoption of digital technologies.¹⁵

26. These SME-focused findings reinforce the view that adoption can be especially transformative for smaller firms, while also highlighting the barriers of skills and organisational capacity that condition how fully SMEs can capture these benefits.

4. Results

4.1. Impact of Marketplace, FBA and AWS on SME productivity

Productivity gains from adoption of Marketplace and FBA

27. To estimate the productivity gains for SMEs that adopted Marketplace or FBA, we drew on the reported percentage changes in turnover and staff time during their first year of use from our survey. For each respondent, productivity gains were computed using the following equation:

$$Productivity\ Gain = \frac{1 + \Delta\ Turnover}{1 + \Delta\ Staff\ time} - 1$$

28. This formula captures the increase in output (turnover) relative to the change in labour input (total staff time), providing a direct measure of labour productivity improvement in the first year of adoption.¹⁶

¹² Gal, Nicoletti, Renault, Sorbe, Timiliotis (2019) [Digitalisation and productivity: In search of the holy grail – Firm-level empirical evidence from EU countries](#), OECD. CRM refers to customer relationship management software.

¹³ European Central Bank (2024), [Digitalisation and productivity](#).

¹⁴ Garicano and Santaló (2024), [Can platform-supported digitalisation raise the productivity of European firms?](#)

¹⁵ Skare, de las Mercedes de Obesso, Ribeiro-Navarrete (2023), [Digital transformation and European small and medium enterprises \(SMEs\): A comparative study using digital economy and society index data](#), International Journal of Information Management.

¹⁶ This formulation should minimise the consequences of errors in survey responses in respect of turnover and staff time, since those errors are likely to be positively correlated with each other, reducing their impact when measuring productivity – since it relies on a ratio of the other two.

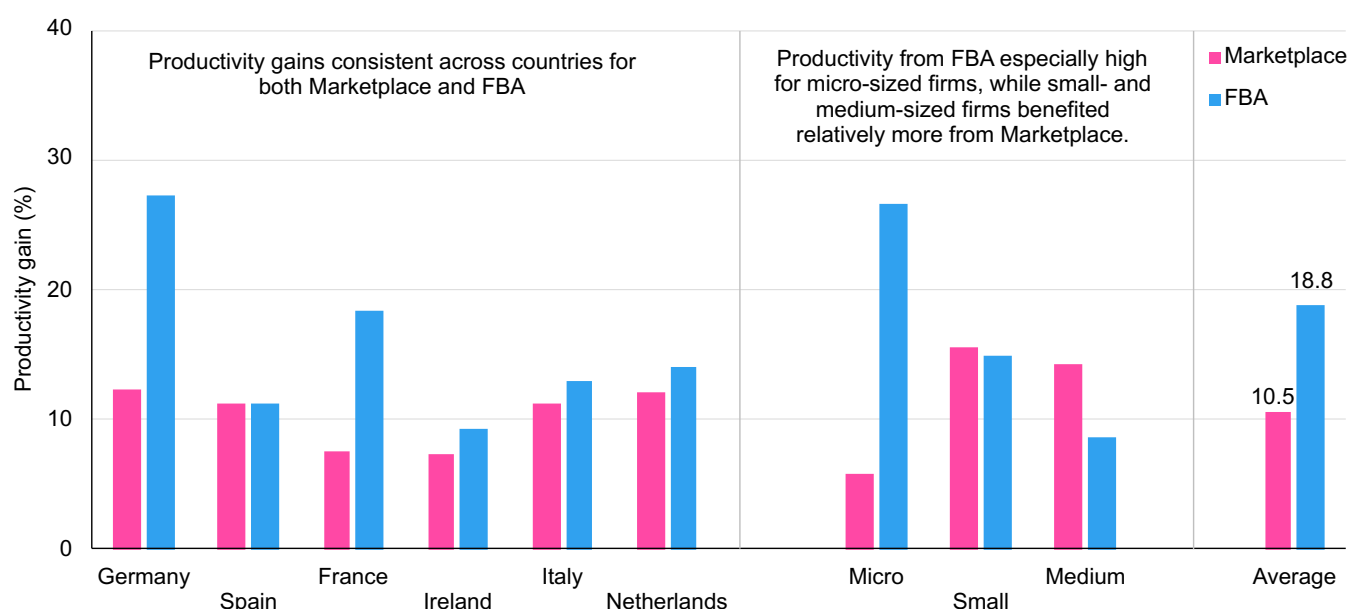


29. On average, firms that used these services experienced:

- **A 10.5% increase in productivity during the first year for new Marketplace users** – comprised of an 8.8% increase in turnover relative to a 0.8% increase in staff time; and
- **An 18.8% increase in productivity during the first year for FBA users** – with an 8.2% increase in turnover compared to a negative 3.1% decrease in total staff time.

30. The left panel of Figure 7 shows that these productivity gains are consistent across surveyed countries while the middle panel shows that the results are also consistent across firm size, albeit with more variation. By size, micro firms gain proportionately more from FBA than small- or medium-sized firms, whereas the reverse is true for Marketplace. This may be due to the fact that logistics efficiencies from FBA are especially valuable for smaller firms with limited in-house fulfilment capacity, whereas the wider customer reach offered by Marketplace tends to be more advantageous for larger SMEs that already have the scale and product range to exploit expanded demand. Our survey results support this distinction, with 63% of SME respondents citing 'faster delivery times' as one of the main reasons for using FBA.

Figure 7: First-year productivity gains of Marketplace and FBA users by country and firm size

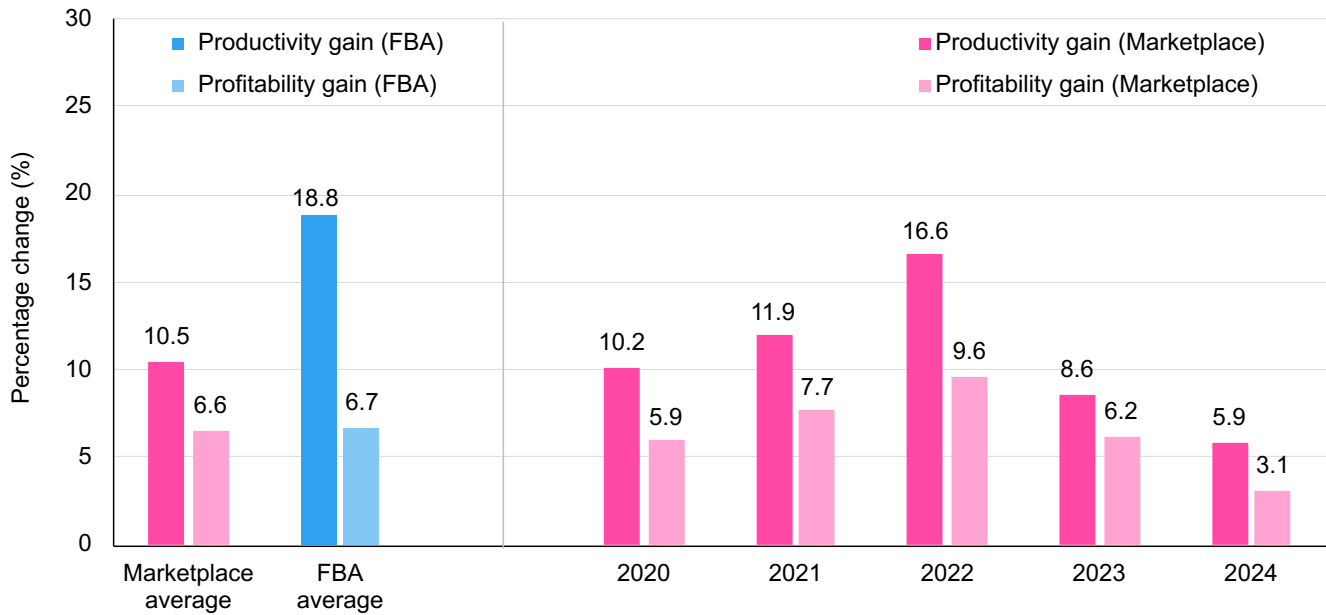


Source: Flint Analysis.

Impact on profitability

31. While our main focus is on the impact of Marketplace and FBA on productivity, another useful measure is profitability. Survey respondents were asked by how much their average profit per unit sold had changed in the first year after adopting Marketplace or FBA. We would expect profitability to be positively correlated with productivity and the results, presented in Figure 8 (left panel), confirm this. The average improvement in profitability for FBA users is 6.7%, compared to an 18.8% improvement in productivity. For Marketplace users the improvement in profitability is a very similar 6.6%, compared to a 10.5% average productivity gain. Figure 8 (right panel) shows that the year-by-year pattern (shown for just Marketplace users) also closely tracks productivity.



Figure 8: First-year impact on profitability for Marketplace and FBA users

Source: Flint Analysis.

Productivity gains from the adoption of AWS

32. To estimate productivity gains from the adoption of AWS we utilise the Katz and Jung study described above. This is a different measure of productivity than the one we have estimated for Marketplace and FBA. Our two survey-based measures of productivity are binary, firm-level events: a company either adopts the service, or it does not, with the impact on productivity observed as a discrete change during the first year of use (through self-reported impacts on turnover and staff time).
33. By contrast, the Katz and Jung study measures the productivity impact of cloud computing (not just AWS) through an economy-wide, continuous indicator of adoption intensity, combining the share of firms using cloud services with cloud spending as a proportion of GDP (Figure 6, above). This approach is justified when measuring changes at the aggregate, in this case Europe-wide, level. Another reason is that it captures an important distinction between cloud computing and Marketplace or FBA in that the latter two are more closely linked to specific sectors and activities, for example retail and logistics, whereas cloud computing is a cross-sector general-purpose technology whose productivity impacts are felt more widely across manufacturing, services, and knowledge-intensive industries.
34. In Katz and Jung, the estimated coefficient of 0.145 is best interpreted as an 'elasticity of labour productivity' with respect to cloud adoption intensity. To make this comparable with our adoption-based measures for Marketplace and FBA, the elasticity can be applied to changes in the proportion of firms adopting cloud services. For example, moving from partial to full adoption across firms can be translated into a percentage gain in productivity, while incremental increases in adoption rates can also be expressed in terms of productivity impacts.
35. To estimate the productivity gain for SME users of AWS we apply the 0.145 elasticity to the increase in cloud intensity for EU SMEs between 2016 and 2023, as captured in Eurostat statistics. This approach takes the observed change in SME cloud adoption between 2014 and 2023 as the input to the elasticity, thereby deriving an implied productivity gain over time. The rationale is that the 0.145 coefficient measures how much labour productivity increases, on average, when the share of firms adopting cloud rises. By substituting SME-specific adoption data, we translate this economy-wide parameter into a SME-focused estimate. The rationale for this methodology is three-fold:



- First, the elasticity is defined at the level of adoption intensity, meaning it can correctly be applied to changes in adoption shares between two points in time. This enables us to generate a measure of average productivity contribution from cloud adoption that is more comparable to the binary firm-level measures we use for Marketplace and FBA.
- Second, while the Katz and Jung model is based on the whole economy, it provides a useful benchmark for SMEs. As discussed above, some SMEs may face capability gaps that constrain their ability to fully exploit cloud services, but they may also experience disproportionately large marginal gains from adoption because cloud allows them to access enterprise-grade technologies without the fixed costs of in-house provision. These factors push in opposite directions, suggesting the use of an economy-wide elasticity is unlikely to be materially biased in either direction.
- Third, framed in this way, the elasticity functions as an ‘adoption elasticity of productivity’, providing a basis for comparison that is consistent with the binary adoption measures we use for Marketplace and FBA.

36. Using the economy-wide elasticity for SMEs, therefore, represents a reasonable middle ground. We use the baseline elasticity of 0.145 rather than the higher 0.189 estimated for high-AI adoption environments, on the basis that SMEs use AI less intensively than large firms.
37. Finally, we believe this methodology can be applied to measure the productivity benefits for AWS specifically and not just cloud computing more generally. Katz and Jung measure the effect of cloud computing as a whole, but the productivity relationship they estimate is vendor-neutral. AWS provides the same type of general-purpose cloud services as other providers, so the elasticity is as valid for AWS adopters as it for cloud adopters in general.
38. Between 2014 and 2023, the share of SMEs in the EU using cloud services rose from 17.4% to 44.3%. Applying the 0.145 elasticity to this change in adoption intensity implies a cumulative labour productivity gain of around 14.5% per firm over the period. While the measure is not the same, it is conceptually comparable to our Marketplace and FBA estimates: just as they capture the discrete productivity improvement that occurs in the first year after adoption, here we capture the cumulative productivity improvement associated with the increase in SME cloud adoption between two points in time.

4.2. Aggregate impact on the EU economy

39. Converting the measured productivity gains into aggregate euro values requires scaling using published data sources – primarily Eurostat’s Structural Business Statistics, which provides detailed information on EU SMEs, including gross value added (GVA). Assuming that Amazon-using SMEs have broadly similar characteristics to the wider SME population, we estimate that they collectively generate between €50bn and €100bn in GVA each year. Applying our estimated percentage productivity gains for FBA, Marketplace and AWS as a permanent one-off improvement translates into additional productivity of around €10bn to €20bn annually across the three services.
40. While any aggregate estimate of this kind involves some uncertainty, the direction and scale of the results are clear and internally consistent. They indicate that the productivity benefits associated with these services are both economically meaningful and robust within reasonable bounds of confidence. Even at the lower end of this range, the gains are material – equivalent to a substantial uplift in the productive capacity of tens of thousands of European SMEs.



5. Conclusions

41. This report has assessed the productivity impact of three Amazon services – Marketplace, Fulfilment by Amazon (FBA), and Amazon Web Services (AWS) – for SMEs in Europe. Both the survey-based results and those based on existing econometric studies show meaningful gains in productivity for SMEs. Marketplace and FBA enable SMEs to reach wider markets and improve logistics efficiency, while AWS provides scalable digital infrastructure that lowers barriers to advanced IT adoption.
42. Our results suggest that the gains are material. SMEs adopting Marketplace and FBA report first-year productivity increases of 10.5% and 18.8% respectively. For AWS, rising SME cloud adoption between 2014 and 2023 implies a cumulative productivity gain of 14.5% per adopter. We estimate that these translate to an additional €10bn to €20bn in GVA for the EU economy each year. These findings underline how digital adoption can raise output more quickly than labour input, creating real improvements in labour productivity across different sectors and firm sizes.
43. As with any study of this sort, there are some caveats: survey-based results may not capture all nuances of firm-level behaviour; the AWS estimates are derived from economy-wide elasticities applied to SME adoption data; and we have not allowed for either the attrition of benefits over time nor a rise in benefits over time as adoption is enhanced with complementary investments or scaling up.
44. But the central message from these estimates is clear: the adoption of Amazon’s digital services by SMEs help them overcome traditional barriers to scale, whether by opening new customer markets, reducing fixed costs, or providing access to enterprise-grade digital tools. In the context of Europe’s long-standing productivity gap, highlighted in the Draghi report, such gains are valuable. Realising them more broadly will require not only access to digital services but also complementary investment in skills and organisational change. Supporting SMEs to adopt and integrate these tools should therefore remain a central priority for Europe’s growth and competitiveness agenda.





Contact us



Met Building, 22 Percy Street, London, W1T 2BU



+ 44 (0)207 362 9733



economicmodelling@flint-global.com



www.flint-global.com