International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. 14, Issue 11, Nov 2026

https://ijecm.co.uk/

ARTIFICIAL INTELLIGENCE, INFLATION, AND ECONOMIC GROWTH: IS AI RESHAPING THE MACROECONOMIC DYNAMICS OF EMERGING ECONOMIES?

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Abstract

Forecasts of the economic effect of artificial intelligence (AI) range from a 7 percent rise in world GDP over ten years to a gain of about 1 percent, and almost all of them are built on data from the United States and Europe. This paper asks what can already be seen in emerging economies. We link the IMF AI Preparedness Index (AIPI) for 2023 with IMF data on real GDP growth and consumer price inflation for 42 emerging economies over 2015–2025, and compare 2015–2019 with 2023–2025. We use cross-country OLS and a fixed-effects panel. A 0.1-point higher AIPI goes with 0.6 points more growth and 3.5 points less inflation, but neither estimate is significant at 10 percent. With growth in 2015–2019 in the model, the growth coefficient falls to 0.29, and R^2 rises from 0.04 to 0.37. With past inflation and the 2022 shock in the model, R^2 for inflation reaches 0.70, and the AIPI coefficient falls to -1.6 ($p = 0.19$). In the panel, the AIPI effect on inflation in 2023–2025 is -1.9 points ($p = 0.15$) and on growth 0.1 points ($p = 0.81$). The AIPI was already linked with lower inflation in 2015–2019, before generative AI existed, so it

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seems to measure institutional and digital capacity more than the use of AI. Albania, with an AIPI of 0.53 (20th of 42), fits this picture: its good results in 2023–2025 are better explained by tourism, remittances, and a credible central bank than by AI.
Keywords: Artificial intelligence; inflation; economic growth; emerging economies; AI preparedness; productivity

INTRODUCTION

ChatGPT was released in November 2022, and within a year university students in Albania, as in most countries, were using it for coursework, while banks and telecom operators introduced AI chatbots. The economic effect of these tools is far less clear than their popularity. Goldman Sachs economists put the gain at 7 percent of world GDP and 1.5 points of extra US labor productivity growth per year over a decade (Briggs & Kodnani, 2023). Acemoglu (2025), counting the tasks that AI can actually do at a profit, gets a TFP gain of about 0.7 percent in total over ten years, or around 0.07 points a year.

For the Bank of Albania, or any central bank with a 3 percent inflation target, the gap between these two numbers is not academic. A productivity shock of 1.5 points a year would lower unit labor costs and allow lower interest rates without risk to the target; 0.07 points would change nothing. Aldasoro et al. (2024) simulate the US case and find AI lowers inflation in the first years, with part of the effect reversed later as investment and consumption pick up. For emerging economies, we have no comparable estimates. The IMF counts about 40 percent of jobs there as exposed to AI, against 60 percent in advanced economies (Cazzaniga et al., 2024), and in 2022 the median country in our sample had inflation of 8.4 percent, for many of them the highest in two decades.

We do not forecast. We use the first three years of data after the release of ChatGPT and ask: *Is AI already changing the relationship between inflation and growth in emerging economies?* Concretely, we test whether the 21 countries with AIPI above the median (0.516) had higher growth or lower inflation in 2023–2025 than the 21 below it, and whether any gap remains after controlling for 2015–2019 outcomes and for inflation in 2022.

Purpose of the study

The purpose of this study is to examine whether AI preparedness is already associated with the growth and inflation performance of emerging economies in the first three years after generative AI tools became widely available.

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The study has three objectives: (i) to describe how AI preparedness differs across 42 emerging economies and where Albania and its Western Balkan neighbors stand; (ii) to test whether countries with higher AI preparedness had higher real GDP growth and lower inflation in 2023–2025; and (iii) to check whether any such differences remain once each country's pre-pandemic performance and the 2022 inflation shock are taken into account. To our knowledge, this is one of the first tests of the link between AI and the macroeconomy in emerging economies that uses observed outcomes rather than model projections or firm-level experiments.

All series come from the IMF DataMapper, downloaded on 1 November 2026: the AIPI for 2023 and the World Economic Outlook series NGDP_RPCH (real GDP growth) and PCPIPCH (average consumer price inflation). The sample covers 42 emerging economies, from Pakistan (AIPI 0.37) to China (0.64), and includes Albania together with Serbia, Montenegro, North Macedonia and Bosnia and Herzegovina.

Section 2 covers the literature, and Section 3 covers our framework and hypotheses H1–H3. Sections 4 and 5 present the data, method and results (Tables 2–7, Figures 2–5); Sections 6 and 7 discuss them and list limitations.

LITERATURE REVIEW

Technology, productivity and growth

In Solow (1956), output per worker grows in the long run only through technical progress; Romer (1990) makes the rate of progress depend on resources spent on research. Diffusion is slow. Comin and Hobijn (2010) date the arrival of 15 technologies, from steamships to the internet, in 166 countries and find an average lag of 45 years between invention and adoption. By their estimate, differences in these lags explain at least a quarter of today's gaps in income per capita.

Electric motors were in factories by 1900, yet US manufacturing productivity rose fast only in the 1920s. Solow's 1987 remark that computers were everywhere except in the productivity statistics describes the same delay. Brynjolfsson et al. (2021) explain it with intangible investment: training, new processes, and software are costs today and output tomorrow, so measured TFP first dips and then rises (the J-curve). Gordon (2016) argues that the gains from digital technology after 2004 have been small compared with those from electricity or the combustion engine. Policy also matters. For Albania, Trebicka (2015) finds that fiscal policy has a measurable effect on growth, and the return on AI is unlikely to be independent of public spending on education and infrastructure.

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Artificial intelligence and the macroeconomy

Acemoglu and Restrepo (2018, 2019) model automation as a race: machines take tasks from workers (displacement) while new labor tasks appear (reinstatement), and wages rise only if the second keeps up. Aghion et al. (2019) add Baumol's cost disease. Sectors that cannot be automated become a larger share of GDP and hold down aggregate growth. Acemoglu (2025) puts numbers on this. About 20 percent of US tasks are exposed to AI, and only around a quarter of those can be automated at a profit within ten years. With average cost savings of about 27 percent on those tasks, he arrives at a TFP gain of about 0.7 percent over the decade.

Firm data show larger effects for single tasks. In Noy and Zhang (2023), 453 college-educated professionals wrote memos, reports, and press releases; those with ChatGPT needed 40 percent less time, and their texts were graded 18 percent higher. In a large US call center, an AI assistant raised issues resolved per hour by 14 percent on average and by 34 percent for new and low-skilled agents (Brynjolfsson et al., 2025). Gains of this kind for workers with less experience could matter for emerging economies. Still, writing tasks and call centers are a small part of GDP.

AI and inflation

Work on AI and inflation is thin. Aldasoro et al. (2024) build a multi-sector model in which AI raises productivity by different amounts across sectors. Inflation is lower in the first years, but households expect higher future income, consume more, and part of the effect disappears; how much depends on whether adoption is expected and on the central bank's reaction. Korinek and Suh (2024) study scenarios with artificial general intelligence within 5 to 20 years, where wages could first rise and then collapse. Neither paper estimates anything with data from emerging economies.

Emerging economies and AI readiness

Cazzaniga et al. (2024) estimate that about 40 percent of jobs worldwide are exposed to AI: 60 percent in advanced economies, 40 percent in emerging markets and 26 percent in low-income countries. Exposure here means both risk and opportunity. The same paper introduces the AIPI, built from indicators in four groups: digital infrastructure, human capital and labor market policy, innovation and economic integration, and regulation and ethics. Calvino and Fontanelli (2023) show with firm data from 11 countries that AI users are larger, younger, and more productive than other firms. Felten et al. (2021) find that exposure is highest in white-collar, high-wage occupations such as finance and law.

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In emerging economies, part of the work is done by unregistered firms and workers. These firms have little access to bank credit and almost no digital records, so they are unlikely to adopt AI. Trebicka (2014) estimated a large underground economy in Albania, and it is common in many other countries in our sample. This is one reason to suspect that the AIPI also captures formality and institutional quality, which we test in Section 5.

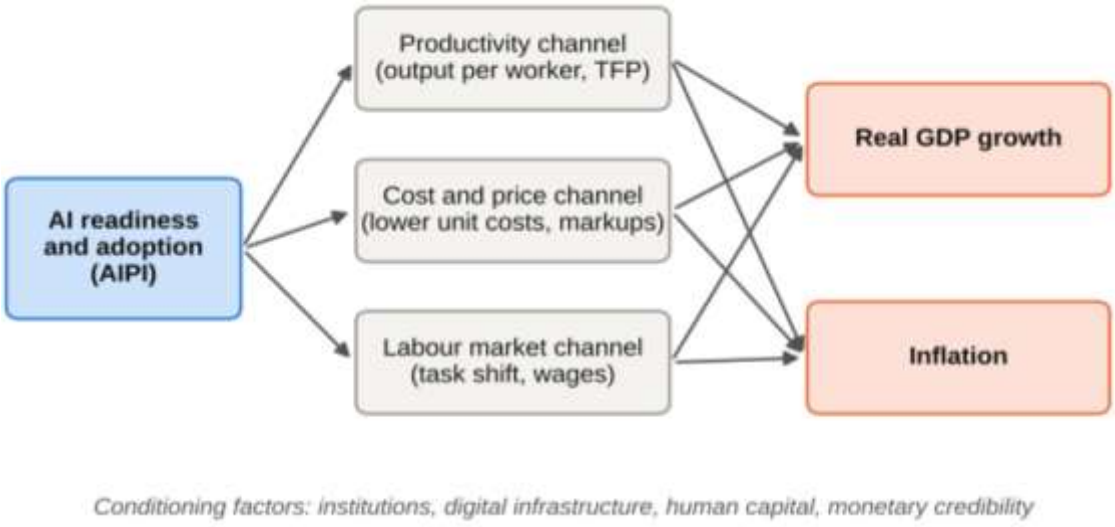
Research gap

Most empirical work on AI uses firm or task data from the United States and Europe; macro studies are model simulations. We did not find a paper that relates AI readiness to actual growth and inflation in emerging economies after 2022. Our test is simple and uses only three post-2022 years, but it uses outcomes, not projections.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Figure 1 shows three channels. Productivity: AI lets each worker produce more (TFP, output per hour), which raises growth. Costs and prices: document processing, customer service, and coding become cheaper, unit costs fall, and in markets with new entrants, markups may fall too. Labor market: tasks move between workers and software and wages change, which affects both demand and costs, so the sign of the effect on inflation is unclear. The strength of each channel depends on institutions, broadband coverage, skills and the credibility of monetary policy.

Figure 1. Conceptual framework: channels from AI preparedness to growth and inflation



Source: Authors' elaboration based on Acemoglu and Restrepo (2019), Aldasoro et al. (2024) and Cazzaniga et al. (2024).

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H1: A higher AIPI goes with higher average real GDP growth in 2023–2025.

H2: A higher AIPI goes with lower average inflation in 2023–2025.

H3: H1 and H2 hold with controls for 2015–2019 growth and inflation and for inflation in 2022.

METHODOLOGY

Research design

The study uses a quantitative, explanatory research design based on secondary macroeconomic data. It combines a cross-section of 42 emerging economies with a country-year panel for 2015–2025. The design follows a before-and-after logic: outcomes in the generative AI period (2023–2025) are compared with outcomes in the pre-AI period (2015–2019), and the pandemic and energy-shock years (2020–2022) are treated separately. AI preparedness, measured by the IMF AIPI for 2023, is the explanatory variable of interest; real GDP growth and consumer price inflation are the outcome variables. The analysis has three steps: descriptive statistics, correlations, and non-parametric group comparisons (Section 5.1); cross-country OLS regressions with controls for past performance (Sections 5.2 and 5.3); and a fixed-effects panel that compares each country with itself over time (Section 5.4). Because the design is observational and the AIPI is available for one year only, all estimates are read as associations, not causal effects.

Sample and variables

We started from the IMF list of emerging market economies and dropped those without an AIPI score or with gaps in growth or inflation data, as well as Ukraine, Lebanon, Syria and Venezuela, where war or collapse drives the numbers. Low-income developing countries are a separate IMF group and are not included. The final sample is 42 countries, 14 in Europe and Central Asia, 10 in Latin America, 7 in Asia and 11 in the Middle East and Africa (Table A1). Values for 2025 are IMF estimates.

Table 1. Variables and data sources

Variable	Definition	Source
AIPI	AI Preparedness Index, 2023 (0 to 1)	IMF (2024)
Growth	Real GDP growth, annual %	IMF WEO (2026)
Inflation	Consumer prices, annual average % change	IMF WEO (2026)
Pre-AI period	Average of 2015–2019	Authors' calculation
Shock period	2020–2022 (pandemic and energy shock)	Authors' calculation
Generative AI period	Average of 2023–2025	Authors' calculation
Disinflation	Inflation 2022 minus inflation 2025 (pp)	Authors' calculation

IMF = International Monetary Fund; WEO = World Economic Outlook database.

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The AIPI measures readiness, not use, and the IMF has published it only for 2023. Two facts make it usable for us: no adoption data exist for 42 emerging economies, and a 2023 score comes before the 2023–2025 outcomes.

Empirical strategy

Our first method uses one observation for each country:

$$Y_{i,post} = \alpha + \beta \cdot AIPI_i + \gamma \cdot Y_{i,pre} + \delta \cdot X_i + \varepsilon_i$$

Y_i, post is mean growth or inflation in 2023–2025, Y_i, pre is the mean for 2015–2019; and X_i is inflation in 2022. AIPI is multiplied by 10, so one unit is 0.1 index points (the sample SD is 0.06). With N = 42, we use HC3 standard errors (MacKinnon-White type), which have better size in small samples than HC0. Argentina (131.8 percent) and Türkiye (49.1 percent) had mean inflation in 2023–2025 more than five SD above the rest. They are excluded from Models 4–6; Model 7 keeps them and uses $100 \cdot \ln(1 + \pi/100)$.

Our second method uses yearly data:

$$Y_{it} = \mu_i + \lambda_t + \beta_1 \cdot (AIPI_i \times Post_t) + \beta_2 \cdot (AIPI_i \times Shock_t) + u_{it}$$

μ_i and λ_t are country and year fixed effects. $Post_t = 1$ in 2023–2025 and $Shock_t = 1$ in 2020–2022, so the base period is 2015–2019, and β_1 compares each country with itself. AIPI is centered on the mean. Standard errors are clustered by country (42 or 40 clusters). Since the AIPI correlates with income, schooling, and governance, β and β_1 are associations, not causal effects.

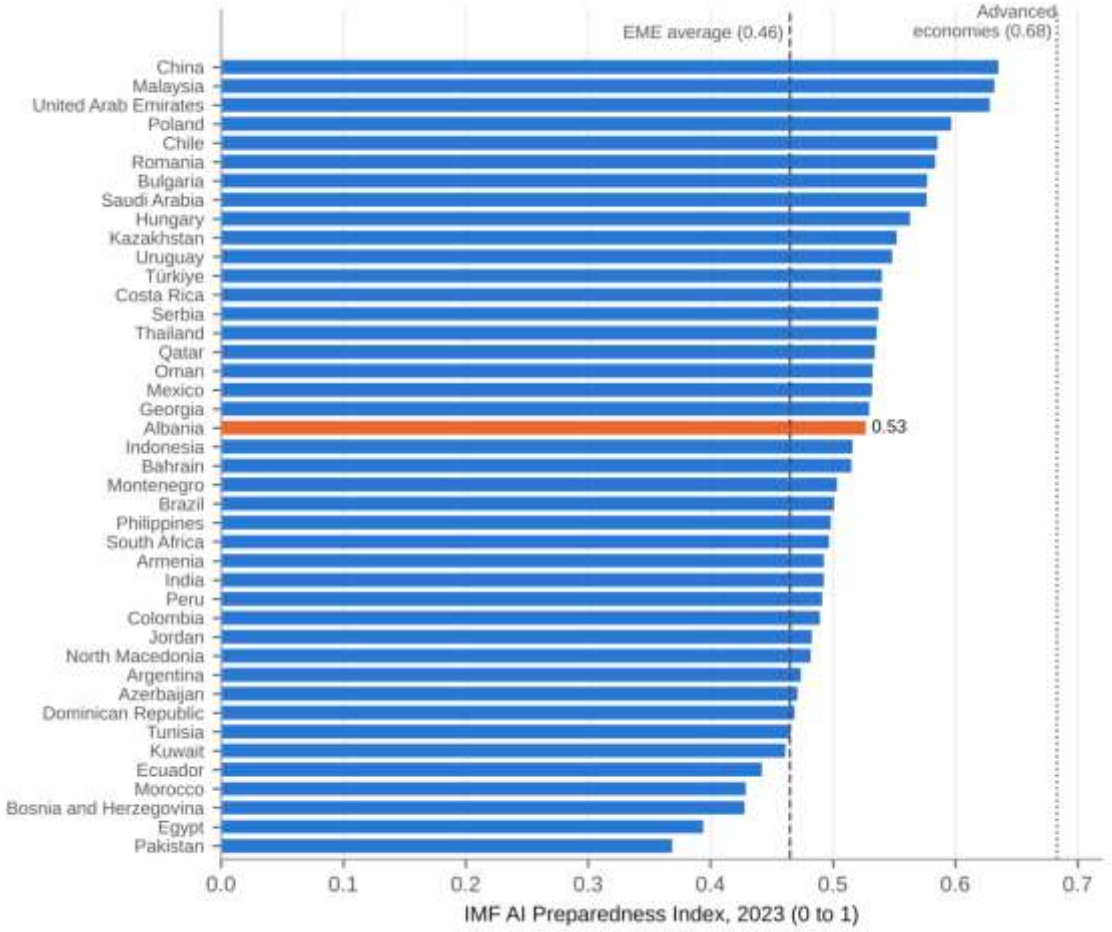
RESULTS

Descriptive evidence

AIPI values (Figure 2) range from 0.37 (Pakistan) to 0.64 (China), with a mean of 0.52. No country in the sample reaches the advanced-economy mean of 0.68. Albania scores 0.53 and ranks 20th, above the IMF emerging-market mean of 0.46 and above North Macedonia (0.48), Montenegro (0.50) and Bosnia and Herzegovina (0.43), but below Serbia (0.54), Romania (0.58) and Bulgaria (0.58).

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Figure 2. AI Preparedness Index in 42 emerging economies, 2023



Source: Authors' elaboration based on IMF (2024), AI Preparedness Index. Dashed line: IMF average for emerging market economies;
dotted line: average for advanced economies. Albania highlighted.

Table 2. Descriptive statistics

Variable	N	Mean	SD	Min	Median	Max
AIPI (2023)	42	0.52	0.06	0.37	0.52	0.64
Growth 2015–2019 (%)	42	3.18	1.78	-0.50	3.14	6.72
Growth 2023–2025 (%)	42	3.16	1.92	-0.13	2.78	8.33
Inflation 2015–2019 (%)	42	4.03	6.21	0.04	1.93	37.83
Inflation 2023–2025 (%)	42	8.91	21.13	0.00	4.00	131.77
Inflation 2022 (%)	42	11.51	14.31	2.00	8.40	72.40
Inflation 2023–2025, excl. ARG, TUR (%)	40	4.83	4.90	0.00	3.97	26.03

Source: Authors' calculations based on IMF WEO (2026) and IMF (2024). Argentina has no inflation data for 2015–2016 in the WEO database; its pre-period average uses 2017–2019.

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Table 2 shows that average growth in 2023–2025 was almost the same as before the pandemic (3.16 and 3.18 percent). Inflation was much higher. Argentina and Türkiye raise the average a lot. Without them, average inflation in 2023–2025 was 4.83 percent, compared with 3.00 percent in 2015–2019. The median, 4.00 percent, shows a better situation than in a normal country.

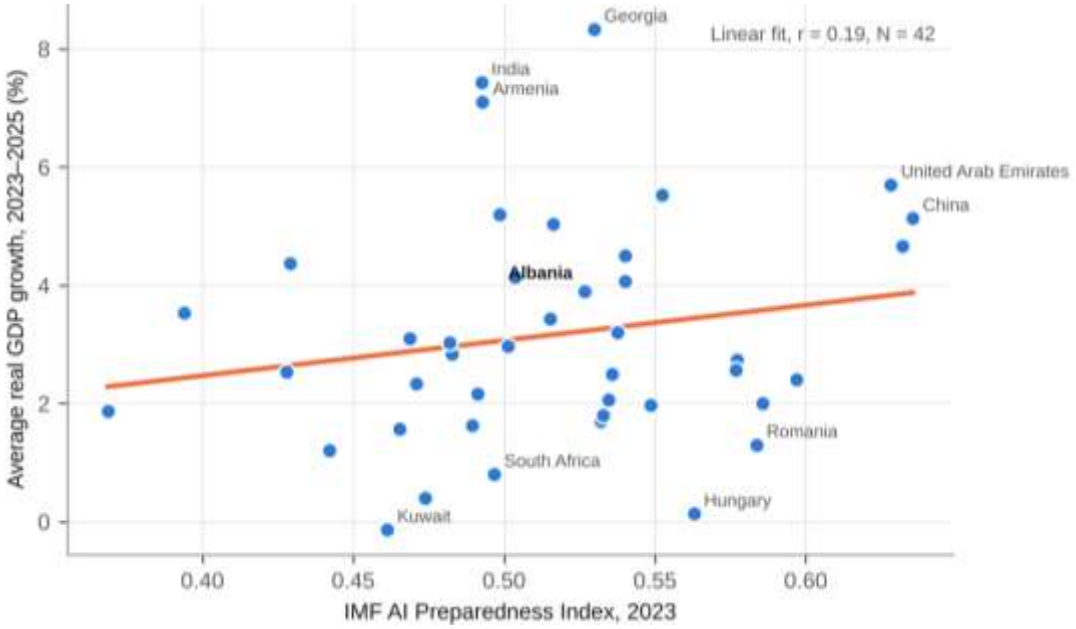
Table 3. Correlation matrix (N = 40, excluding Argentina and Türkiye)

	(1)	(2)	(3)	(4)	(5)	(6)
(1) AIPI	1.00					
(2) Growth 2015–19	0.13	1.00				
(3) Growth 2023–25	0.16	0.57	1.00			
(4) Inflation 2015–19	-0.32	-0.09	0.05	1.00		
(5) Inflation 2023–25	-0.43	0.09	-0.16	0.73	1.00	
(6) Inflation 2022	-0.10	0.00	-0.09	0.16	0.47	1.00

Source: Authors' calculations based on IMF WEO (2026) and IMF (2024).

Table 3 shows the correlations. The AI index has a weak positive link with recent growth (r = 0.16) and a stronger negative link with recent inflation (r = -0.43). But the AI index is also linked with lower inflation in 2015–2019 (r = -0.32), when generative AI did not exist yet. Both growth and inflation depend a lot on the past. Recent inflation has a correlation of 0.73 with inflation before the pandemic, and recent growth has a correlation of 0.57 with past growth. So, countries that are ready for AI may simply continue a pattern of low inflation that they had before AI.

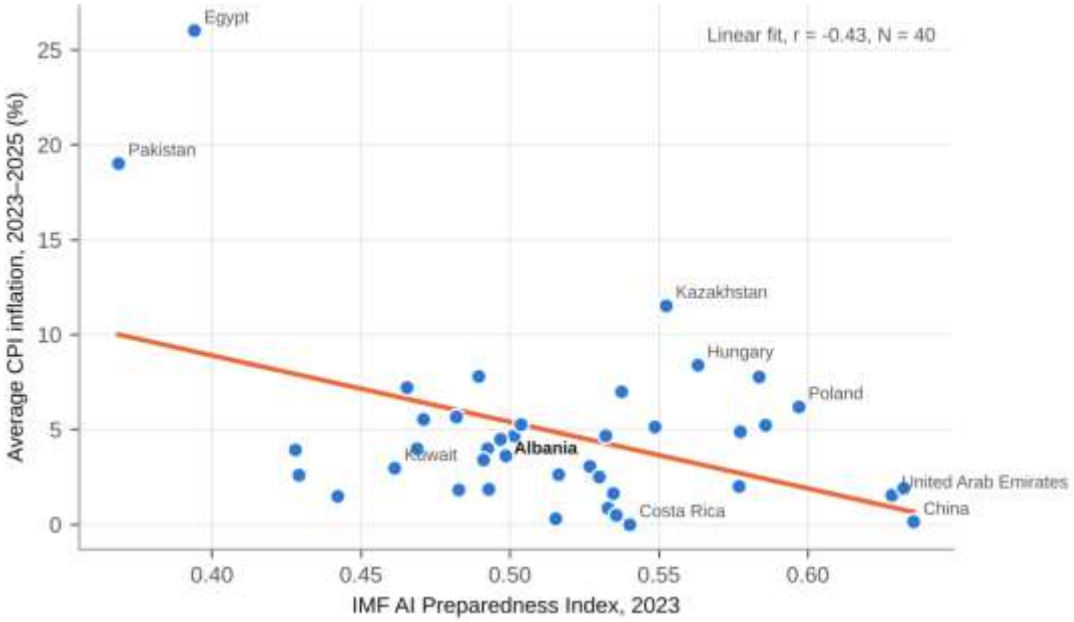
Figure 3. AI preparedness and average real GDP growth, 2023–2025 (42 economies)



Source: Authors' elaboration based on IMF WEO (2026) and IMF (2024).

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Figure 4. AI preparedness and average inflation, 2023–2025 (40 economies)



Source: Authors' elaboration based on IMF WEO (2026) and IMF (2024). Argentina and Türkiye are excluded because their average inflation was above 45 percent.

In Figures 3 and 4, the spread around the fitted lines is large. Georgia (8.3 percent), India (7.4 percent), and Armenia (7.1 percent) had the highest growth with AIPI scores of 0.49–0.53, while Hungary (0.1 percent) and Romania (1.3 percent) grew slowly with scores of 0.56–0.58. In Figure 4, Egypt (26.0 percent) and Pakistan (19.0 percent) pull the line down; both went through large devaluations and IMF programmes in 2023–2024.

Table 4. Median values for high and low AI preparedness groups (median split at AIPI = 0.516)

Variable	High AIPI (n = 21)	Low AIPI (n = 21)	Mann–Whitney p
AIPI (2023)	0.55	0.48	
Growth 2015–2019 (%)	3.22	3.10	0.41
Growth 2023–2025 (%)	2.73	2.83	0.42
Inflation 2015–2019 (%)	1.78	2.50	0.27
Inflation 2022 (%)	8.30	8.50	
Inflation 2023–2025 (%)	3.07	4.00	0.39

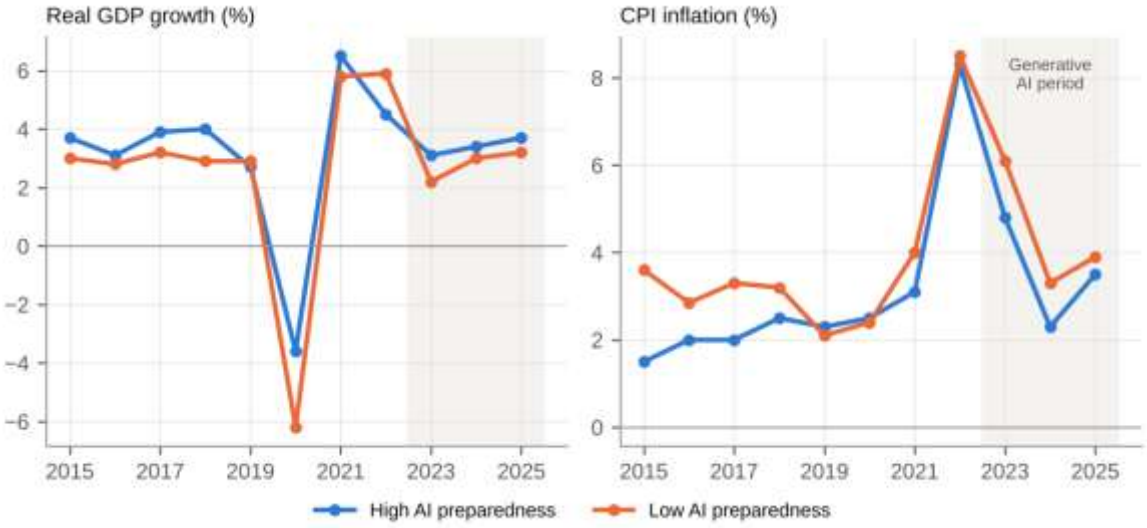
Source: Authors' calculations based on IMF WEO (2026) and IMF (2024).

With the sample split at the median AIPI (Table 4), median inflation in 2022 was 8.3 percent in the high group and 8.5 percent in the low group. Median inflation in 2023–2025 was 3.07 and 4.00 percent. Mann–Whitney p-values are between 0.27 and 0.42, so no gap is significant. In Figure 5, median growth of the two groups differs by less than one point in each

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year of 2023–2025; median inflation in the high group was below the low group in 2015–2018, equal in 2022 (8.3 against 8.5), and lower in 2023 (4.8 against 6.1) and 2024 (2.3 against 3.3).

Figure 5. Median real GDP growth and inflation by AI preparedness group, 2015–2025



Source: Authors' elaboration based on IMF WEO (2026) and IMF (2024). Groups are defined by the median AIPI. Shaded area: generative AI period (2023–2025).

Regression results: growth

Table 5. Cross-country regressions: dependent variable is average real GDP growth, 2023–2025

	Model 1	Model 2	Model 3
AIPI (per 0.1 points)	0.597	0.293	0.259
	(0.399)	(0.425)	(0.444)
Growth 2015–2019		0.630***	0.616***
		(0.149)	(0.166)
Inflation 2022			-0.037
			(0.077)
Constant	0.082	-0.358	0.189
	(2.067)	(2.110)	(2.615)
Sample	Full	Full	Excl. ARG, TUR
N	42	42	40
R^2	0.035	0.366	0.336
Adjusted R^2	0.010	0.333	0.281

Source: Authors' estimations. Robust (HC3) standard errors in parentheses.

*** p < 0.01, ** p < 0.05, * p < 0.1.

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Table 5 tests H1. In Model 1, the AIPI coefficient is 0.60 (p = 0.13), and R^2 is 0.035. In Model 2, growth in 2015–2019 enters with 0.63 (p < 0.001); the AIPI coefficient drops to 0.29 (p = 0.49), and R^2 rises to 0.37. In Model 3, without Argentina and Türkiye and with inflation in 2022, the AIPI coefficient is 0.26 (p = 0.56) and the 2022 shock is not significant (p = 0.63). H1 is rejected.

Regression results: inflation

Table 6. Cross-country regressions: dependent variable is average inflation, 2023–2025

	Model 4	**Model 5**	**Model 6**	**Model 7**
AIPI (per 0.1 points)	-3.504	-1.788	-1.642	0.383
	(2.143)	(1.431)	(1.266)	(1.899)
Inflation 2015–2019		1.104***	1.021**	
		(0.397)	(0.511)	
Log inflation 2015–2019				2.419***
				(0.733)
Inflation 2022			0.427***	
			(0.126)	
Constant	22.911**	10.751	6.624	-3.822
	(11.585)	(7.578)	(6.358)	(10.887)
Dependent variable	Inflation	Inflation	Inflation	Log inflation
Sample	Excl. ARG, TUR	Excl. ARG, TUR	Excl. ARG, TUR	Full
N	40	40	40	42
R^2	0.189	0.582	0.701	0.856
Adjusted R^2	0.168	0.559	0.676	0.849

Source: Authors' estimations. Robust (HC3) standard errors in parentheses.
Log inflation = 100·ln(1 + π/100). *** p < 0.01, ** p < 0.05, * p < 0.1.

Table 6 tests H2. Model 4: AIPI coefficient -3.50, p = 0.10, R^2 = 0.19. Model 5 adds inflation in 2015–2019 (1.10, p = 0.005); the AIPI coefficient is -1.79 (p = 0.21) and R^2 = 0.58. Model 6 adds inflation in 2022 (0.43, p = 0.001); R^2 = 0.70 and the AIPI coefficient is -1.64 (p = 0.19). Model 7, in logs and with all 42 countries, gives 0.38 (p = 0.84). H2 has weak support only in Model 4. H3 is rejected for growth and for inflation.

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Panel estimates and robustness

Table 7. Panel fixed-effects estimates, 2015–2025

	Real GDP growth	Inflation (excl. ARG, TUR)
AIPI × Generative AI period (2023–2025)	0.121	-1.949
	(0.501)	(1.339)
AIPI × Shock period (2020–2022)	-0.303	0.665
	(0.344)	(1.310)
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Countries	42	40
Observations	460	440
R^2	0.693	0.642

Source: Authors' estimations. Standard errors clustered by country in parentheses. AIPI is centered on the sample mean and measured per 0.1 points.

Reference period: 2015–2019. *** p < 0.01, ** p < 0.05, * p < 0.1.

In the panel (Table 7), the AIPI × Post coefficient is 0.12 for growth (p = 0.81) and -1.95 for inflation (p = 0.15). The inflation estimate means that a country with an AIPI 0.1 points above the mean had inflation 1.9 points lower in 2023–2025 than in 2015–2019, relative to the other countries. It is the largest AI-related estimate in the paper, but its 90 percent confidence interval includes zero. The AIPI × Shock coefficients (-0.30 for growth, 0.67 for inflation) are not significant.

As a last check, we regress disinflation (inflation in 2022 minus inflation in 2025) on the AIPI and inflation in 2022 for 40 countries. Inflation in 2022 has a coefficient of 0.60 (p < 0.001) and the AIPI has a coefficient of 1.43 (p = 0.37), R^2 = 0.41.

DISCUSSION

The signs in Tables 5–7 are the ones theory predicts, but no AIPI coefficient is significant at 10 percent once 2015–2019 outcomes are controlled for. Our answer to the question in the title is therefore no, at least for 2023–2025 and at the level of national data.

Three explanations fit the data. The first is timing. With a J-curve (Brynjolfsson et al., 2021), firms in 2023–2025 pay for training and data before output rises. The second is size. If AI adds about 1 percent to output over ten years, as Acemoglu (2025) estimates, the effect in three years is around 0.3 percent, far smaller than the 1.9-point SD of growth across our countries. The gains of 14 to 40 percent found by Brynjolfsson et al. (2025) and Noy and Zhang (2023) refer to single tasks, not whole economies. The third is the nature of inflation in emerging economies. Inflation in 2015–2019 and in 2022 explain 70 percent of the variation in 2023–

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2025, and the four countries with the highest recent inflation (Argentina, Türkiye, Egypt and Pakistan) all had currency crises.

The correlation of -0.32 between the AIPI and inflation in 2015–2019 is worth noting, because generative AI did not exist then. A country's AI score seems to reflect the same things that support low inflation: institutions, education, regulation, and central bank independence. The panel coefficient of -1.9 for inflation could be an early sign of a real AI effect, but with $p = 0.15$ it is not a basis for policy.

In Albania, growth averaged 3.9 percent and inflation 3.1 percent in 2023–2025 (4.8 percent in 2023, 2.2 percent in 2024 and 2025), close to the 3 percent target of the Bank of Albania. Tourism, remittances, construction, and the strong lek are more likely causes than AI. The obstacles to future gains are also well known: the informal economy (Trebicka, 2014) and the emigration of young graduates.

CONCLUSIONS AND POLICY IMPLICATIONS

Using IMF data for 42 emerging economies, we find no significant link between AI readiness in 2023 and growth or inflation in 2023–2025 once each country's past is controlled for. Growth in 2015–2019 explains about a third of growth differences after 2022; past inflation and the 2022 shock explain about 70 percent of inflation differences.

Governments in the region should not include AI-driven growth in medium-term budget forecasts, and central banks should not lower inflation projections because of AI. Measures with a clearer payoff are broadband and data access for small firms, AI training in schools and universities, reducing informality, and data protection rules in line with the EU. Central banks could add a question on AI use to their business surveys, so that a productivity effect, if it comes, is noticed early and taken into account in setting interest rates.

Implications for ministries of finance. Medium-term fiscal frameworks should continue to rest on the usual drivers of growth, and any gain from AI should be treated as an upside scenario, not as part of the baseline. Spending that raises AI preparedness, such as digital infrastructure, data systems in public administration and skills, is better justified by its wider returns to productivity and institutional quality. Our results suggest that these qualities are already associated with lower inflation.

Implications for central banks. Past inflation and the 2022 shock explain most of the differences in inflation across countries, so the credibility of monetary policy and the exchange rate still matter far more than AI. Central banks can nevertheless prepare for a possible productivity effect. They can track AI use in business and bank lending surveys, follow prices in

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the services most exposed to AI, such as finance, telecommunications and business services, and include AI scenarios in their forecasting models.

Implications for firms. The experimental studies reviewed in Section 2 show that gains appear first in specific tasks. Firms in emerging economies can start with low-cost uses, such as customer service, document processing, accounting and marketing, and at the same time invest in staff training and data quality, which the J-curve literature identifies as the main complements to AI. Formal firms with digital records are better placed to adopt AI, so lower informality also widens the base of possible adopters.

Implications for universities. If AI preparedness largely reflects human capital and institutions, universities have a long-term role. AI literacy and data skills can be included in programmes in economics, business and public administration, and applied projects with employers can help graduates use these tools in local firms. Better jobs at home would also reduce the incentive for young graduates to emigrate.

Implications for Albania. With an AIPI close to the sample median, Albania is neither a leader nor a laggard. Its recent macroeconomic results should not be read as an AI effect. Priorities should be the factors that the index captures: digital public services, broadband in rural areas, a smaller informal economy, and stronger skills. Progress here would support growth and price stability whether or not AI becomes a large productivity shock.

The study is limited by its sample (42 countries, three years after 2022), by the use of a readiness index for a single year instead of adoption data, and by the fact that the AIPI is correlated with income and governance. We will repeat the tests with data up to 2027 or 2028 and, if possible, with firm-level AI adoption data for Albania.

DECLARATION ON THE USE OF GENERATIVE AI

During the preparation of this work, the authors used Claude (Anthropic), a generative AI tool, to assist with data compilation, statistical analysis, the preparation of tables and figures, drafting of the text, and language editing. After using this tool, the authors reviewed, checked, and edited the data, the results, and the text, and they take full responsibility for the content of this publication.

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APPENDIX

Table A1. Country data: AI preparedness, growth and inflation

Country	AIPI 2023	Growth 2015–19	Growth 2023–25	Inflation 2015–19	Inflation 2023–25
China	0.635	6.72	5.13	2.02	0.13
Malaysia	0.632	4.88	4.67	1.94	1.90
United Arab Emirates	0.628	2.90	5.70	1.78	1.53
Poland	0.597	4.68	2.40	0.88	6.20
Chile	0.586	2.00	2.00	2.98	5.23
Romania	0.584	4.74	1.30	1.50	7.77
Bulgaria	0.577	3.04	2.73	0.78	4.90
Saudi Arabia	0.577	2.50	2.57	0.74	2.00
Hungary	0.563	4.18	0.13	1.78	8.40
Kazakhstan	0.552	2.88	5.53	8.04	11.53
Uruguay	0.549	0.98	1.97	8.00	5.13
Türkiye	0.540	4.34	4.07	11.64	49.10
Costa Rica	0.540	3.54	4.50	1.34	0.00
Serbia	0.537	3.22	3.20	1.92	7.00
Thailand	0.536	3.40	2.50	0.36	0.50
Qatar	0.535	1.66	2.07	0.68	1.63
Oman	0.533	2.10	1.80	0.74	0.87
Mexico	0.532	1.60	1.70	4.00	4.67
Georgia	0.530	4.70	8.33	3.92	2.50
Albania	0.527	2.98	3.90	1.72	3.07
Indonesia	0.516	5.04	5.03	3.96	2.63
Bahrain	0.515	3.10	3.43	1.82	0.30
Montenegro	0.504	3.64	4.13	1.34	5.27
Brazil	0.501	-0.50	2.97	5.70	4.67
Philippines	0.498	6.54	5.20	2.50	3.63
South Africa	0.497	1.02	0.80	4.98	4.50
Armenia	0.493	4.74	7.10	1.44	1.87
India	0.493	6.70	7.43	4.24	4.00
Peru	0.491	3.20	2.17	2.66	3.40
Colombia	0.489	2.46	1.63	4.70	7.80
Jordan	0.483	2.18	2.83	1.38	1.83
North Macedonia	0.482	2.92	3.03	0.60	5.67
Argentina	0.474	-0.24	0.40	37.83	131.77
Azerbaijan	0.471	0.44	2.33	6.84	5.53
Dominican Republic	0.469	5.92	3.10	2.22	4.00
Tunisia	0.465	1.72	1.57	5.46	7.20
Kuwait	0.461	0.76	-0.13	1.90	2.97
Ecuador	0.442	1.32	1.20	1.24	1.47
Morocco	0.429	3.18	4.37	1.14	2.60
Bosnia and Herzegovina	0.428	3.48	2.53	0.04	3.93
Egypt	0.394	4.74	3.53	15.90	26.03
Pakistan	0.369	4.34	1.87	4.74	19.03

Source: Authors' calculations based on IMF WEO (2026) and IMF (2024). Values are period averages in percent; Argentina's 2015–19 inflation average covers 2017–2019.

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