

Panama

Archetype **Stalled middle**

GDP / person **\$20k**

Population **5M**

10-yr trend **4.2%**

Gradual **9.1%** · #69

Fast **12.2%** · #62

WHERE PANAMA STARTS

Panama enters the AGI era as a stalled-middle economy: upper-middle income, middling scores, and a widening gap to every faster group. Yet one score stands out. Physical build speed is 4.5 out of 5, reflecting the expanded Panama Canal, Central America's first metro, the Tocumen airport hub and the Colón Free Zone. Its dollarized banking sector and logistics trade are real strengths. What holds it back is thinner ground. Compute and energy access scores 1.1, near the bottom, because Panama has almost no data-center capacity. Catch-up headroom and geopolitical positioning both sit at 2, a sign of limited room to import gains and a weak seat at the tables that decide chip access. Ten-year trend growth of 4.2% a year is strong for the region. Income is about \$19,790 per person.

THE THREE PATHS

These are simulations, not forecasts. The Modest path is the baseline, and the two AGI scenarios fork from it. Under the Modest scenario, AI stays a normal technology. Panama would gain a little on trend: 4.4% growth a year, 38th of 157. Its strengths in trade and finance keep it competitive in an ordinary world. Under **Gradual** takeoff, growth would climb over two decades and reach 9.1% a year once AGI matures around 2045, a doubling every eight years. But its rank would fall to 69th, because faster economies pull ahead while Panama's middling scores hold it back. Under **Fast** takeoff, growth would reach 12.2% a year from the early 2030s, a doubling every six years, and its rank would recover to 62nd. Even so, Panama would trail the leaders. Regulation and politics could slow or redirect any of these paths. How Panamanians and their government respond to transformative AI is a variable the model holds constant.

HOW YOU WOULD KNOW WHICH WORLD YOU ARE IN

The three scenarios look almost the same until about 2030. So watch leading indicators, not GDP, and check them live rather than trust a snapshot. Three global signals matter most. First, whether the METR task-horizon curve keeps doubling every four to five months through 2027–28; METR publishes it at metr.org. Second, whether frontier-lab revenue and capital spending keep compounding; Epoch AI tracks both at epoch.ai. Third, whether growth in the ten to twenty most-ready economies — the United States and China above all — breaks above trend in the early 2030s. Double-digit growth there within a couple of years of 2030 would

point to a fast world; a point or two above trend by the mid-2030s to a gradual one; a fade back to trend to a modest one. Panama's own signals would arrive earlier: any hyperscaler hosting commitment on Panamanian soil, financial close on new power generation, and the order books at the Colón Free Zone and the canal.

IF GROWTH GOES EXPLOSIVE

Explosive is relative. At 12.2% growth a year under fast takeoff, Panama would run ahead of its region, whose economies would grow around 9.2%. But it would trail the frontier badly, as the United States compounds more than three times as fast. Against its own history the change would be real: an economy doubling every six years means a child starting school today finishing in a country twice as rich. Trade, logistics and finance would deepen, and rising labor demand and wages would draw the migrant workers Panama already attracts. There is a way this leaves Panama worse off. Its computing power would be rented, not owned, and a weak geopolitical seat, a score of 2, leaves it a rule-taker caught between Washington and Beijing, pressure already visible over the canal ports. The hedge is to own capacity and spread its partners. Even then, the pace-setter shifts to the state: the canal authority, banking supervisors, permitting offices and courts, whose limits the 2023 copper-mine protests exposed.

WHAT PANAMA CAN DO NOW

Three levers follow from the scores, and two pay off whether or not AGI arrives. The first is AI diffusion, low at 2.3. Digital skills, permissive deployment rules and digitized government services raise growth even in the skeptic's world, so this is a no-regret move Panama can start today. The second is geopolitical positioning, also low at 2. Deepening trusted-partner frameworks and protecting access to capital markets is worth doing under any scenario, and it becomes vital for chip access if AI takes off. A cautious government can act on both now at no loss. The third lever is the bet. Compute and energy access, at 1.1, barely moves growth if AI stays ordinary, but under fast takeoff it becomes Panama's single biggest lever. Closing it means packaging cheap power, land and fast permits to attract data-center investment. Mexico did this in Querétaro, now one of Latin America's fastest-growing data-center clusters. To explore how moving these scores would reshape Panama's path under each scenario, open the atlas's [policy editor](#).

The three levers — and which pay off regardless

AI diffusion capacity

score 2.3 / 5 · weight 24 under skeptic → 13 under fast takeoff

Counts under the Modest scenario too (24→13). Closing this gap pays off whether or not AGI arrives.

No-regret

Compute & energy access

score 1.1 / 5 · weight 8 under skeptic → 24 under fast takeoff

Weight climbs from 8 to 24 as takeoff nears. It barely moves growth if AI stays ordinary — the lever that needs a view on the takeoff.

AGI bet

Trusted chip & tech access

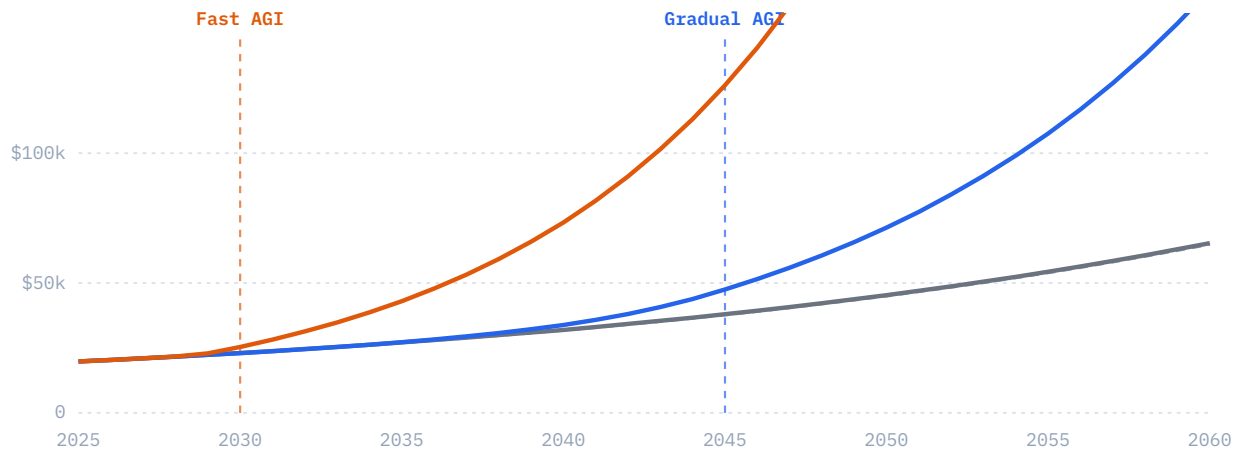
score 2 / 5 · weight 8 under skeptic → 12 under fast takeoff

Weight climbs from 8 to 12 as takeoff nears. It barely moves growth if AI stays ordinary — the lever that needs a view on the takeoff.

AGI bet

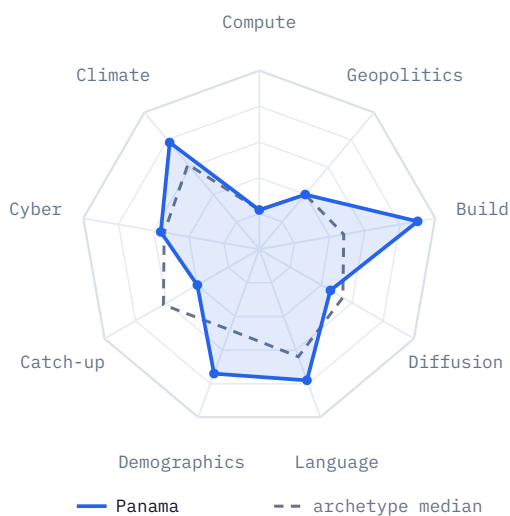
The no-regret levers pay off in every scenario, so a cautious government can act on them today. The AGI bets become decisive only if takeoff is real.

GDP per person to 2060, by scenario



Linear scale; solid lines are the three scenarios, dashed grey the no-AI baseline. Growth ramps from 2027 to each scenario's rate at its AGI year (Fast ~2030, Gradual ~2045), then holds. Timing and divergence are the point, not end levels; steep paths exit the top of the capped axis.

The nine factors



Solid: Panama. Dashed: the median of its archetype. Scores are relative to the other 156 countries (3 ≈ global median, 5 = leading today).

Outcomes under each scenario

SCENARIO	GROWTH / YR	WORLD RANK	INDEX	DOUBLING
Modest	4.4%	38 / 157	55.2	16.1 yrs
Gradual	9.1%	69 / 157	54.2	8 yrs
Fast	12.2%	62 / 157	53.8	6 yrs

Post-AGI growth rate, rank among 157 countries, AGI Growth Index (0–100, scenario-weighted), and the implied economy doubling time. The Modest path is the baseline the AGI scenarios fork from.

THE THREE SCENARIOS

Modest the Acemoglu view

AI as a normal productivity tool

Intelligence was never the binding constraint on growth, so AI delivers real but ordinary gains. Each country gets a one-time boost of a couple of percent of GDP, phased in through 2035; growth then returns to trend. The mainstream-economics view.

≤0.66% TFP over a decade — a one-time gain

Panama: 4.4% growth a year · #38 of 157

Gradual Erdil & Besiroglu, base case

Broad automation, on a long timeline

Broad automation of remote work arrives around 2045, with gains building slowly from the late 2020s. Growth then reaches up to ~20% a year for the best-positioned countries — ten times today's frontier trend. A slow arrival gives countries time to adapt, so the gains are wide but uneven.

up to ~20%/yr after 2045 — 10× the frontier trend

Panama: 9.1% growth a year · #69 of 157

Fast Erdil & Besiroglu, fast takeoff

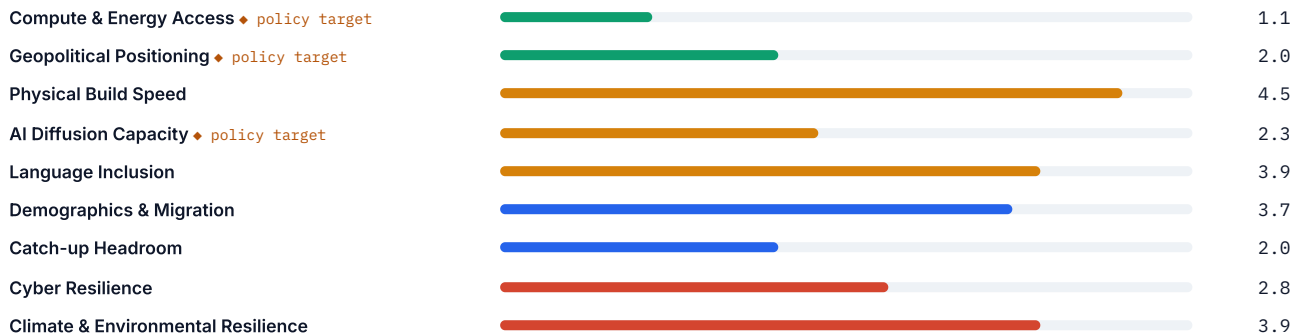
Fast takeoff — today's infrastructure decides

Transformation lands around 2030, before countries can adjust. Whoever already owns compute, capital and the ability to build wins; the gap between countries widens dramatically — and some are left growing slower than they would have without AGI.

up to ~40%/yr from 2030

Panama: 12.2% growth a year · #62 of 157

Factor scores — and where policy bites



♦ marks this country's highest-leverage policy targets: the weakest factors carrying the most weight under the AGI scenarios. The atlas's interactive policy editor (agigrowth.org/#editor) simulates how raising any score changes growth under each scenario.

Archetype: Stalled middle

Neither frontier nor fragile: middling income, middling scores, slow growth — at every size, from micro-states to Brazil.

Wins: No clean window — gains arrive imported, and late.

Watch: Drift: the gap to every faster group compounds year by year.

Jordan 11.8% · #37

Brazil 11% · #43

Mexico 10.4% · #48

Ecuador 10% · #54

Thailand 10% · #55

Slovakia 9.6% · #59

Argentina 9.5% · #61

Lithuania 9.3% · #63

Cabo Verde 9.3% · #64

Croatia 9.1% · #67

The regional picture — Mid-table, and outside the blocs.

Latin America enters the era mid-table on almost every factor — and mostly outside the blocs that decide access. Chile leads on institutions and hosts real compute; Brazil and Mexico have hyperscaler regions and huge domestic markets but thin R&D; Uruguay and Costa Rica absorb well at small scale; Guyana is converting an oil windfall into the hemisphere's fastest construction boom. The region's twenty-year question is what happens to nearshoring: the manufacturing and services work that moved toward Mexico and Central America on labor costs is the work automation reprices first, and no country here has a plan B at scale. Distance from the US-China rivalry cuts both ways — few export controls apply, and few strategic investments arrive. Under the modest lens the region loses little; under fast takeoff it drifts: gains arrive, mostly imported, mostly late, and the gap to the frontier compounds year by year.

Method, in brief

Each country is scored 1–5 on nine factors from public data (World Bank, Epoch AI, ITU, IMF and national sources). A scenario-weighted average forms the AGI Growth Index (0–100), which maps to a post-AGI growth rate inside ceilings derived from Erdil & Besiroglu (2023): ~20% growth a year for the best-positioned country under Gradual takeoff (AGI ~2045), ~40% under Fast (AGI ~2030); growth ramps convexly from 2027. The scenario sets the growth rates on offer; the index only decides where each country sits within them. The Modest scenario is the skeptics' baseline — a small uplift on each country's own ten-year trend. These are simulations for structured thinking, not forecasts; no probabilities are attached to any scenario.

Watch the global signals live: the METR task-horizon curve at metr.org/time-horizons · frontier-lab revenue at epoch.ai/ai-companies · AI-chip spending at epoch.ai/ai-chip-sales.

Explore further: full methodology agigrowth.org/#methodology · map & rankings agigrowth.org/#explore · country profiles agigrowth.org/#countries · policy editor agigrowth.org/#editor