

# Analysis of Turkey's Investment Potential as an Emerging Market

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**Abstract.** The global economy is in a context of rapid change and Turkey is standing out with strong and stable economic growth. As a candidate for EU membership, Turkey is one of the largest countries in Europe, and its favourable geographical location makes it an important energy and logistics corridor linking Europe, the Middle East, the Caucasus and Central Asia. In this paper, by analyzing some important indicators between Turkey and the US, this research tries to provide investors with some guidance on whether it is worthwhile to invest in Turkey

**Keywords:** Turkey; Investment potential; GDP; United States.

## 1. Introduction

This research tries to provide investors with some guidance on whether it is worthwhile to invest in Turkey. Turkey's GDP per capita increased far more quickly than comparable nations in Emerging Markets. Turkey is ranked 10th among emerging markets in terms of GDP per capita. Turkey's economy is regarded as one that is in the process of evolving into a developed market economy, making it an emerging market economy. It has a developed financial system infrastructure, high GDP growth, rising per capita income, and increased liquidity in the debt and stock markets. (The investopedia team, 2022)

## 2. Comparative analysis of some important indicators between Turkey and the US

Due to its business-friendly environment, quality of life considerations, and dedication to specific technology, supply chain, infrastructure, and labour factors, the United States is the top investment destination. Businesses from all countries and sectors can successfully enter the market thanks to the nation's diversity and openness. (selectUSA, n.d.)The US boasts the biggest market in the world, a skilled and diverse labour force, a wide array of sources of funding, and it is relatively easy to do business there. It may be possible to gain some insight into whether Turkey is a worthwhile investment by comparing a number of significant metrics between Turkey and the US.

**Table 1.** Some important indicators between Turkey and the US

	Turkey	United States
GDP per person (Y/POP)	10655.46	62866.71
GDP per worker (Y/L)	$\frac{905.99bn}{31360000} = 28889.987$	$\frac{25462.7bn}{159244000} = 159897.390$
Capital-output ratio (K/Y)	$\frac{\frac{I}{Y}}{\frac{\Delta Y}{Y}} = \frac{\frac{905.99bn \times 31.2\%(saving\ rate)}{905.99bn}}{\frac{1.029t - 905.99bn}{905.99bn}} = 2.298$	$\frac{\frac{I}{Y}}{\frac{\Delta Y}{Y}} = \frac{\frac{25462.7bn \times 17.8\%(saving\ rate)}{25462.7bn}}{\frac{25896bn(expected) - 25462.7bn}{25462.7bn}} = 10.46$
Capital per worker (K/L)	$\Delta K = I - \delta K = \frac{905.99bn \times 31.2\%}{31360000} - 0.3(\delta) \frac{65.918bn(K)}{31360000} = 8383.18$	$\Delta K = I - \delta K = \frac{25462.7bn \times 17.8\%}{159244000} - 0.15 \frac{1349862.25mn(K)}{159244000} = 27193.99$
Employment rate (L/POP)	36.76%	47.6%

Source: CEIC data & trading economics

We can observe from the table above that there are significant differences between all of the given indicators. Beginning with a comparison of GDP per capita. A measure of a country's economic production that takes into consideration the population or the number of residents. Economists can evaluate a country's wealth and economic development by looking at its GDP per capita. As we can see from the table, the US has a much higher GDP per capita than Turkey, which reflects both the US's higher standard of living and the fact that technologically advanced societies tend to have higher GDP per capita due to their ability to increase productivity and produce more goods with fewer workers.

Economic geography can have an impact on GDP per capita. If there are neighbours who specialise in a related field, the supply chain for the finished product may be shortened, leading to more producer competition and cheaper prices, which may result in a low GDP and low GDP per capita. The neighbouring nations of Turkey (Bulgaria, Greece, Armenia, Azerbaijan, Iran, Georgia, Syria, and Iraq) have similar industries (chemicals, electronics, food processing, iron, and textiles), which may be one of the reasons why Turkey has a relatively low GDP per capita. And the primary industries in Turkey are those mentioned above. Given the fierce competition in these areas, this might not be a positive indicator for investors.

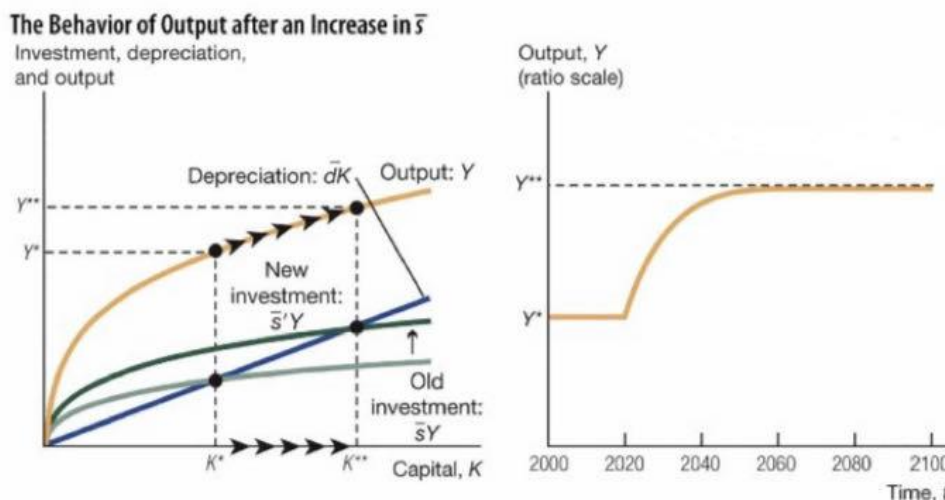
Population growth is another aspect that has an impact on GDP per capita statistics. If population growth outpaces economic growth, a country's GDP per capita will be negative even though economic development is positive. Infants, immigrants, and refugees make up the majority of the population growth. Infants cannot be counted as workers but are nonetheless included in the population for purposes of calculating GDP per capita. Also, refugees are unlikely to work in Turkey. Low GDP per capita may therefore not reflect low labour productivity or ineffective labour. Given that Turkey's population only increased by 0.7% in 2022 (trading economics), the country's comparatively low GDP per capita may be caused by lower productivity or a lower employment rate than in the US, which, if true, would not be a positive indicator for investors.

It is necessary to take another metric, GDP per worker, into account in order to research this. Gross domestic product (GDP) divided by total employment in the economy equals GDP per worker. It indicates output per unit of labour input, or labour productivity. The US has a GDP per worker that is almost 5.5 times that of Turkey, as the table above illustrates. Additionally, a comparison of the employment rates for the two nations reveals that Turkey has a lower employment rate than the United States. Therefore, it may be appropriate to draw the conclusion that Turkey, in comparison to the US, has lower labour productivity or is utilising the workforce less effectively.

The capital output ratio is the next statistic to take into account. The capital needed to produce one unit of output is known as the capital output ratio (COR). The capital-output ratio in Turkey is five times lower than it is in the US, according to the table. A decreasing capital-output ratio indicates increased capital productivity and technological advancement. This is viewed as a favourable position for investors since it suggests that capital is particularly productive or efficient and that less investment is needed to produce a specific rate of economic growth in Turkey. This may be due to the fact that the US economy is capital-saturated, making the declining return higher.

A further indicator that can provide some insight into Turkey's investment prospects is capital per worker. According to the table, capital per worker is computed as investment minus capital depreciation. Turkey's depreciation rate is approximated to 0.3 in this report because the depreciation rate for countries is not publicly available and should be between 0 and 1. However, when calculated using a different method, Turkey's government asset depreciation rate is between 20% and 40%. As a result, 30% of the average is taken. According to YiShengBu's research, developing countries may experience higher rates of fixed capital depreciation than what is typically thought for advanced industrial nations. (Bu, 2006) For the US, a depreciation rate of 0.15 is estimated. These approximations result in the capital per worker for Turkey being 8383.18 dollars and the US being 27193.99 dollars. When investment per worker outpaces depreciation per worker, capital per worker rises. Therefore, the evidence we have implies that US investment exceeds depreciation more. In comparison to the US, this cannot be viewed as a good chance for investors to make short-term

investments in Turkey. This is due to the fact that, in line with the Solow model, capital accumulation cannot be the main factor driving long-term per-capita economic development. Although investment is advantageous in the short term, long-term growth per capita cannot be sustained because of diminishing returns. Although an increase in investment will shift the investment line up and enhance output, due to declining returns on investment, capital and income stop expanding and stabilise without the advancement of technology.



**Figure 1.** Return on investment.

And consider a rich (R) and a poor country (P), giving the following formula:

$$\frac{y_R^*}{y_P^*} = \left(\frac{A_R}{A_P}\right)^{\frac{1}{1-\alpha}} \left(\frac{S_R}{S_P}\right)^{\frac{\alpha}{1-\alpha}} \left(\frac{\delta_P}{\delta_R}\right)^{\frac{\alpha}{1-\alpha}}$$

Given that  $\alpha/1-\alpha = 1/2$ , a saving ratio of 3-4 between the rich and poor countries' saving rates generates differences in GDP per capita of a factor of 1.7-2. This is far too small compared to the GDP gaps we find between Turkey and the US. Differences in GDP per capita cannot be explained by difference in saving rate. Thus, we can conclude that most of the cross-country variation in GDP must be explained by technology, TFP (total factor of production).

In order to understand the gap between developed and developing economies, we need to dig deeper into process of technological change.

$$A = \frac{Y}{[K^\alpha L^{1-\alpha}]} = \frac{\frac{Y}{L}}{\left(\frac{K}{L}\right)^\alpha}$$

TFP (total factor of production) is calculated from the table to be 19057.78 for Turkey and 49439.67 for the US. The Romer model states that TFP can be raised by investing more money in idea generation, such as through R&D, education, and incentives for choosing research-oriented degrees. Additionally, it can be enhanced by increasing the productivity of idea generation. There may be tradeoffs, though, where less output is done today in exchange for more production afterwards. Therefore, it is a sign that should be taken into account while making long-term investments as technology can't be changed in the short run.

Realising and sustaining price stability is the Central Bank of the Republic of Turkey's (CBRT) fundamental goal. The 5% inflation objective that was established in conjunction with the government has been upheld. The monetary policy will be designed to gradually decrease inflation to the desired level. The interest rate was increased by Turkey's central bank to 25% in August. Following a rise to 17.5 percent from 15 percent last month, there has been an increase of 7.5 percentage points. This unexpected action deviates further from past policy, which centred on maintaining low interest rates. This is a terrible warning for investors since it can imply that inflation is out of control and has

continued to rise. The government has no choice but to continually raise interest rates. (bank, 2022) (data, n.d.)

Additionally, the implementation of the floating exchange rate regime will continue, and exchange rates will be set by supply and demand variables that balance in a free market. The exchange rate is directly correlated with monetary policy. The two primary goals of monetary policy, employment and inflation, can both be impacted by the exchange rate. Monetary policy includes enabling currency rates to not float freely or to be fixed in an effort to manage them. In Turkey, the government wants to achieve a 5% inflation objective, and exchange policy ensures that the exchange rate only fluctuates within a specific range. As a result, monetary policy and exchange rate policy are rather consistent. This set of exchange rate and monetary policy does not support economic growth.

According to Turkey's circumstances, they shouldn't encourage economic expansion because they already have extremely high inflation, and doing so will just exacerbate it.

Turkey has had a range of economic difficulties over the previous ten years, including erratic growth rates, substantial currency devaluations, and spikes in inflation.

<https://manaramagazine.org/2023/07/turkeys-monetary-policy-experiment/>

Turkey's annual inflation rate increased to 47.8% in July 2023 from 38.2% in June, exceeding market expectations of 47.3% as a result of various tax increases and the weakening of the lira, which caused prices to rise. In addition, the core rate increased from 47.4% to 56.1% in July. Consumer prices increased by 9.5% on a monthly basis, which is the highest increase since January of last year. The Turkish central bank reportedly predicted that by year's end, inflation will reach 58%. The inflation rate's stronger-than-expected increase serves as a reminder of Turkey's ongoing struggle with high cost of living.

Turkey government disregarded the advice of experts and pursued a very unconventional approach to the economy, which has resulted in inflation that is beginning to soar in 2018. This is because government has a strong desire for stronger economic growth. Turkey has the lowest borrowing costs of any country in the OECD because to a dramatic reduction in interest rates that is considerably below the inflation rate. Strong investment and increased consumption were the results.

Turkey may attempt to implement a fixed exchange rate in an effort to solve this issue. Given that low inflation and fixed exchange rates are strongly correlated. This is the result of two factors: a discipline impact (tighter rules are brought about by the political costs of dropping the peg) and a confidence effect (increased confidence increases the propensity to hold domestic currency over goods or foreign currencies). Additionally, the Turkish government should implement measures to limit excessive bank lending in order to partially restore the value of the Lira. <https://www.imf.org/external/pubs/ft/issues2/>

Regarding the exchange rate. Fair value is the sum that, at the measurement date, would be received for the sale of an asset or paid for the transfer of a liability in an orderly transaction between market players. Turkish Lira's fair exchange rate has been 21.00 USD/TRY since September 2022. (RobinBrooks, 2023)

While the actual rate of the lira to the dollar is \$/TRY 26.70, which is higher than the fair value, this shows that the currency is overvalued as you would only get 0.787 dollars back if you invested 1 dollar for 26.7 lira in the market.

When deciding whether to invest in a country, debt is one of the most crucial variables to consider. Financial distress will result from high governmental debt levels. Increased spending on the social safety net and decreased tax revenue collection which also causes budget deficits to widen and often sovereign debt rise as a result of slower economic development.

Different economic sectors may alter their behaviour as a result of debt in order to prevent having to bear the full burden of the debt. These behavioural adjustments either hinder economic growth, make the financial system more fragile, or both. A financial crisis brought on by rising government debt will also bring about a political catastrophe or lock the country into debt-driven deflation. (PETTIS, 2022)

Debts in Turkey amount to 307.308% of nominal GDP, or 2784.18 billion USD. 458698.601 million dollars of these loans are in the form of external debt that is 16.5% of overall debt is made up of external debt. Government debtors who can sell bonds in their native currency have lower default rates. But with this high level of debt, Turkey has a high default rate from my point of view. Additionally, the level of debt has been trending downward since 2022. While external debt surge at the end of 2022. (data, n.d.)

As more of a nation's limited resources are used to pay off its foreign debts, it may find it more difficult to invest in its infrastructure, children's education, or health care Long-term economic growth is hampered by this. Poor debt management coupled with shocks like declining commodity prices or a severe slowdown in the economy can result in debt crises. The fact that external debt is frequently not denominated in the borrower's currency but rather in the borrower's currency usually makes it worse. This implies that it will be harder to pay back the debt if the currency of the borrowing country weakens. (PETTIS, 2022) Turkey's inflation could get worse if the currency drops in value which isn't a good sign for investors.

The following six metrics from the following table can be used to measure institutional quality. The table clearly shows that institutional quality in Turkey is far lower than in the US. From 2013 to 2016, all six of Turkey's indices showed a downward trend.

**Table 2.** Indicators for measuring institutional quality (US)

	United States			
	2013	2014	2015	2016
Control of Corruption: Percentile Rank	88.2	89.4	89.9	90.4
Government Effectiveness: Percentile Rank	91.5	89.4	89.4	91.3
Political Stability and Absence of Violence/Terrorism: Percentile Rank	66.8	65.7	67.1	59.5
Regulatory Quality: Percentile Rank	86.7	88.9	85.6	91.8
Rule of Law: Percentile Rank	90.6	89.9	90.4	91.3
Voice and Accountability: Percentile Rank	84.0	81.8	84.2	84.2

**Table 3.** Indicators for measuring institutional quality (Turkey)

	Turkiye			
	2013	2014	2015	2016
Control of Corruption: Percentile Rank	60.7	53.8	53.8	51.4
Government Effectiveness: Percentile Rank	65.9	68.3	63.5	54.3
Political Stability and Absence of Violence/Terrorism: Percentile Rank	10.9	11.9	9.0	4.8
Regulatory Quality: Percentile Rank	66.8	66.3	63.5	62.0
Rule of Law: Percentile Rank	54.5	54.8	48.6	40.4
Voice and Accountability: Percentile Rank	40.8	36.5	35.5	30.0

Source: Worldwide Governance Indicators

This objective and economic development are more likely to be accomplished in nations with solid institutions that support the rule of law, safeguard human rights, and resist corruption. (Ijaz Uddin, 2023) Investors will be able to tell from these data that Turkey's institutions are not strong. Particularly when compared to the US, economic progress isn't great and keeps becoming worse.

Turkey's market capitalization reached 308.343 billion USD in July 2023, up from a monthly average of 253.839 billion USD. As of June 30th, 2023, the U.S. stock market has a total market capitalization of \$46,199,811.4 million. (data, n.d.)A modest market presence in Turkey is reflected by a low market capitalization for the company. Smaller businesses may have greater development potential than more established ones, but they may also find it more difficult to get funding, generate

a steady stream of income, and benefit from brand awareness. Turkey's government can use expansionary fiscal and monetary policies, increase expenditure on worker training to create a skilled workforce, and invest in infrastructure with government income to provide incentives and tax cuts in order to attract more foreign investment.

Two perspectives must be taken into account when deciding whether to invest in the economy. Because emerging nations usually enjoy quicker economic growth as measured by GDP, investors look to these markets for the possibility of significant returns. In Turkey, this is precisely what is taking place. In Turkey, a young and expanding population supports the country's long-term economic growth prospects. Long-term investment prospects are available in Turkey, where R&D spending will account for 1.09% of GDP in 2020. Although this percentage isn't particularly high, it has exhibited an upward tendency, which is encouraging and suggests that Turkey is paying closer attention to technology advancement. Additionally, 15.7% of Turkey's budget is spent on education. This suggests that Turkey may experience long-term growth in the future brought on by an increase in TFP. (Statistics, 2022)

In the second quarter of 2023, GDP growth is 3.8% compared to the previous year. The household sector saw a 15.6% increase in spending, which was the main driver of the expansion. Higher predicted profits, however, are typically accompanied by substantially higher risk. The small (in comparison to the total debt) but rising quantity of foreign debt and substantial danger of default from external debt will hamper investment. One of Turkey's largest issues is its high headline inflation rate, which is close to 50%. The official inflation target is 5%. Currently hovering at 25%, the key monetary policy rate is anticipated to rise further is another potential menace to Turkey's economy. From my perspective, I don't think that Turkey is a good choice for investing for short run because of its high and uncontrolled inflation and high debt. But as soon as Turkey started to gain control over their inflation and stop interest rate from further rising and keep putting more effort in research and development and education, it might be an appropriate choice for investors to invest in Turkey.

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