

Murray State's Digital Commons

Faculty & Staff Research and Creative Activity

Fall 9-1-2020

Is Turkey backsliding on global competitiveness and democracy amid its EU bid in limbo?

John Taskinsoy

Cemil Kuzey Murray State University, ckuzey@murraystate.edu

Follow this and additional works at: https://digitalcommons.murraystate.edu/faculty



Part of the Business Commons

Recommended Citation

Taskinsoy, John and Kuzey, Cemil, Is Turkey Backsliding on Global Competitiveness and Democracy Amid Its EU Bid in Limbo? (July 10, 2020). Available at SSRN: https://ssrn.com/abstract=3648210 or http://dx.doi.org/10.2139/ssrn.3648210

This Non-Peer Reviewed Publication is brought to you for free and open access by Murray State's Digital Commons. It has been accepted for inclusion in Faculty & Staff Research and Creative Activity by an authorized administrator of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

ABSTRACT

Turks have been around for thousands of years, who have established many states and empires in the "land of Turks" referring to Anatolia (Asia Minor) and the Eastern Thrace. The life of Turks, previously in the Altai Mountains of western Mongolia, commenced in the interior of Asia Minor when Seljugs defeated the Byzantines at Manzikert in 1071 (Malazgirt in Turkish), which also meant the start of Turkification of Asia Minor. After the six century long reign of the Ottoman Empire (1299-1922), Turks were introduced to democracy when Mustafa Kemal abolished the Ottoman Empire in November 1922 by overthrowing Sultan Mehmet VI Vahdettin and established Turkish Republic on October 29, 1923 (The Grand National Assembly elected Mustafa Kemal as President in 1923). After the death of Mustafa Kemal Atatürk (November 10, 1938), Turkey has constantly faced instabilityinflicting developments (i.e. coup d'état, coup by memorandum, failed coup attempts, lack of fiscal and structural reforms, political turmoil, ineffective coalition governments, social unrest, chronic deficits, and repeated economic, financial, and currency crises. Turkey's remarkable economic and democratic performance (6% YoY GDP growth between 2002 and 2007) was halted by endogenous (increasingly dictatorial/authoritarian rule, dysfunctional politics, negative developments in the rule of law, human rights, basic fundamentals, and the Judiciary/legal system) and exogenous factors (the 2008 global financial crisis originated in the U.S.; Cyprus' veto chapter 15 of Turkey's EU accession negotiations; prosecution, conviction, and sentencing of the U.S. pastor Andrew Brunson of terrorism charges for taking part in the 2016 failed coup attempt; Turkey's purchase of Russian S-400 defense system; Turkey's removal from the F-35 program; the U.S. imposed sanctions/tariffs on steel imports from Turkey; repeated attacks on Turkish lira and the subsequent currency crisis).

Keywords: Global Competitiveness Index; EU Accession Negotiations; Turkey; Economic Growth JEL classification: I10, I18, J2, O31, G12, E42, C40, Q5, Q32, Q54, H23

^{*} This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

^a Corresponding author Dr. John Taskinsoy, email address: johntaskinsoy@gmail.com Universiti Malaysia Sarawak (Unimas) - Faculty of Economics & Business, 94300 Kota Samarahan, Sarawak, Malaysia.

^b Associate Professor Cemil Kuzey, Murray State University – Department of Computer Science and Information Systems, ckuzey@murraystate.edu, Kentucky – USA.

1.0 Introduction

Geopolitical risks and related diplomatic tensions were on the rise for Turkey prior to the 2008 global financial crisis (GFC). In December 2006, the EU suspended the opening of eight chapters on Customs Union and said that the negotiations would only resume if Turkey opened its ports (sea and air) to Greek-Cypriot traffic. Turkey-Cyprus relations became severely strained when France¹ and Cyprus have unilaterally blocked other chapters, and in December 2009, Cyprus vetoed chapter 15 related to energy.² Previously, the Turkish Prime Minister Recep Tayyip Erdoğan had been highly praised by the leaders of Muslim nations in the Middle East, Asia and Africa; however, international politics have changed quickly since the historic moment when Prime Minister Erdoğan walked off the stage at the 2009 Davos summit over clash in Gaza and accused Israeli³ President Shimon Peres and his country for engaging in inhumane treatment of Palestinians and killing their women and children.⁴

Turkey has been a devoted client of the International Monetary Fund (IMF) since March 1947, but the first standby agreement was signed in January 1961 subsequent the 1960 military coup (Ismihan et al., 2005). After a total of 19 standby agreements, President Erdoğan feels that Turkey has graduated from the IMF when his government paid off the entirety of its debt to the IMF in 2013. In various speeches, Erdoğan has often stated publicly that "No IMF in Turkey's future" and "IMF chapter will not be reopened" (Eken & Schadler, 2012), but this hardly reflects Turkey's severe financial problems and the ensuing gloomy economic situation. Economists, scholars, and industry participants contend that Turkey's divorce from the IMF can qualify as a graduation since the country is on the brink of an economic crisis (i.e. financial collapse), attributable to excessive private and household debt, a failed coup (July 15, 2016) by a fraction of the Turkish army, massive dollarization, rising unemployment, the August rout (2018), a spike in corporate defaults, and coronavirus pandemic.⁵ Erdogan put an end to the IMF debate by saying Turkey is "far from needing" a bailout package from the IMF.

¹ France taking part in the Cyprus matter angered Ankara because France is not even one of the three guarantors; Greece, Turkey and England. On the Cyprus island, there are currently two countries; the Republic of Cyprus was established in 1960 (EU member since 2004), and the Turkish Republic of Northern Cyprus (TRNC) which was established in 1983 after the Turkish military intervened on the island in 1974 to protect its citizens and the island is divided since then.

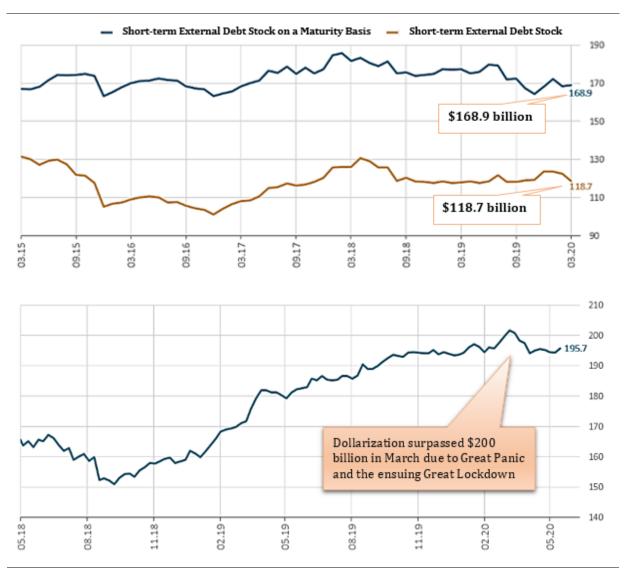
² In 1959, Turkey applied to become a member of the then European Economic Community (EEC), and in 1963, Turkey was accepted to become an associate member. In 1987 (after Spain joined the ECC in 1986), Turkey applied for full membership and almost a decade later (in 1996), Turkey as the first non-EU country joined the Customs Union with the EU. However, at the 1997 Luxembourg summit, Turkey was not placed among the 10 countries to join the EU in May 2004 and 2 more in 2007. Although the EU decision on Turkey was reversed at the 1999 Helsinki summit, just before the 2007 date, the EU suspended opening new chapters and closing opened chapters until Turkey opened its ports to Greek-Cypriot traffic.

³ Ironically, Turkey was the first Muslim nation to recognize Israel as a sovereign state in 1949, but kept its distance due to Turkey's cultural ties with the Arab world; the 1956 Arab-Israeli war; Israel's declaration of Jerusalem as its capital in 1980; the Jenin refugee camp incident in April 2002; Iraq war in 2003; the attacking of Turkish-owned Mavi Marmara (May 31, 2010) by Israeli navy commandos; and Turkey's gas exploration and drilling in the Mediterranean.

⁴ For a longer perspective and detailed discussions on this topic and other related topics, interested readers are welcome to check out Taskinsoy (2012; 2013; 2018; 2019; 2020).

⁵ Financial Times, https://www.ft.com/content/7c9d9851-58cf-4561-9e8e-24dca0e6866e

Before the coronavirus pandemic and the Fed induced Great Panic, a massive financial tsunami hit the Turkish economy in August 2018, the most severe shock since Turkey's economic crisis in 2001 (i.e. prior to and during the crisis, Turkey received over \$30 billion of financial assistance from the IMF). Without the IMF loans, many are skeptic that Turkey will never fully recover from the lasting after-effects of the August rout, underpinned by strong dollarization (see Figure 1), mounting external debt (i.e. over \$430 billion at the end of 2019, \$169 billion of that is in short-term), extremely low net reserves (i.e. less than \$30 billion in April 2020), and the unthinkable cost of the coronavirus crisis (up to \$50 billion); all of these factors (i.e. mounting geopolitical tensions, potential second or third wave of COVID-19 insurgence) make Turkish economy more crisis-prone. President Erdoğan says the IMF is 'not on our agenda', but people speculate that he will have to eventually renege on its pledge.



Source: Turkish central bank (TCMB); https://www.tcmb.gov.tr/wps/wcm/connect/en/tcmb+en

Figure 1: Turkey's short-term external debt and dollarization (\$ billion)

2.0 Literature Review

Along with the Greek and the Chinese, Turks⁶ have been around for at least four thousand years; first lived as nomadic people in Central Asia (i.e. Göktürk Empire united the nomadic Turkic tribes during 552-745), then established various states and empires when Turks (Seljuqs) defeated the Byzantines at Manzikert in 1071, opening the gates of Asia Minor (modern Turkey) to Turks during the medieval period (Jackson, 2002; Inalcik & Quataert, 1995). The Seljuqs era ended by Mongols' repeated attacks (1243 onward); Osman I (the tribal leader) emerged as prince ("bey" in Turkish) when he took over an area in northwestern Anatolia (present Turkish city "Bursa") from the Byzantine, and founded the Ottoman Empire⁷ in 1299 (see Shaw & Shaw, 1977; Kunt & Woodhead, 1995; Kinross, 1977; Inalcik & Quataert, 1995). The Ottoman Empire lasted 623 years (1299-1922); Istanbul's conquest in 1453 by Mehmed II – *Mehmed the Conqueror* (Turkish: Fatih Sultan Mehmet), changed history. During the reign of his grandson Suleiman I (1520-66) – *Suleiman the Magnificent*, the Ottoman Empire became the most powerful in the world ruling 25 million people from Hungary to Yemen; however with the Crimean War (1853-56), financially drained Empire entered the age of collapse and going into WWI on the side of Germany was a fatal decision that brought the Empire's inevitable demise (see Aksakal, 2008; Aksan, 2007; Barkey, 2008; Findley, 2004; Pamuk, 1987; Schaller & Zimmerer, 2008).

The modern era of the Turkish history began in 1923 with the direction of one brilliant man, soldier, politician, strategist, and genius - Mustafa Kemal (Atatürk)⁸; at the time, there was only one university called Darülfünun⁹ inherited from the Ottoman Empire, no own bank (Birdal, 2010; Blaisdell, 1929) and no means of production of even the most basic things¹⁰ (Ahmad, 1993; Altug et al., 2008).

⁶ The name Turkey comes from the Latin word "Turchia" which translates to "land of the Turks".

⁷ The history of the Ottoman Empire is divided into four distinct periods; (1) the age of territorial expansion (1300 – 1481) and restoration (1402-1481); (2) the age of power at its peak (1481 – 1566); (3) the age of decline (1566 – 1807); and (4) the age of collapse and dissolution (1807 – 1922).

⁸ Atatürk (1981-1939), the greatest leader ever, introduced countless very important reforms to guide Turkey to become westernized. These reforms later became laws, which included: family name law; dress law (not using the traditional hat called fez, using modern Western type of hats); use of Turkish alphabet law (Latin alphabet); a law introduced new courts similar to those in Switzerland and Italy and closed down the existing Islamic courthouses. First time in Turkish history or the Ottoman history, Atatürk gave women unprecedented rights never seen before, and he said that "Humankind is made up of two sexes, women and men. Is it possible for humankind to grow by the improvement of only one part while the other part is ignored? Is it possible that if half of a mass is tied to earth with chains that the other half can soar into skies?"

⁹ In July of 1933, based on Professor Malche's findings, the Turkish Parliament abolished Darülfünun and created the Turkish Republic's first university called Istanbul University which also marked a special time in history that the word 'university' was actually used in the Turkish language for the first time.

¹⁰ The 1970s were especially hard times for the students in Turkey; political insatiability led to economic turmoil and created enormous violence due to constant clashes between members of the right-wing/left-wing and the armed forces (police and all branches of the military). In these challenging years, Turkey was divided into several political camps and students in higher education were heavily targeted and recruited to join these different political camps either by choice or by force. The tertiary education institutions throughout the country on a daily basis were under constant threat of attacks or bomb plots. As the unstoppable violence and social unrest kept rising, so did the death toll (estimated 5000 people were killed); the General Kenan Evren (the commander-in-chief), decided to take control and end the violence on September 12, 1980 which marked the third coup since the establishment of the Turkish Republic (1960, 1971, and 1980).

Table 1: Ottoman foreign debt before OPDA 1854-77

Year	Debt Amount £	Issue Rate %	Used Amount £	Used Amount %	Nominal Interest %	Effective Interest %	Allocated to	Major investor country
1854	3,000,000	80.00	2,280,000	76.00	6.0	7.9	Crimean War	Britain
1855	5,000,000	102.6	5,130,000	102.00	4.0	3.9	Crimean War	Britain
1858	5,000,000	76.00	3,680,000	74.00	6.0	8.1	Support exchange rate	Britain
1860	2,000,000	62.50	1,270,000	62.00	6.0	9.6	Budget deficit	France
1862	8,000,000	68.00	5,440,000	68.00	6.0	8.8	Withdrawal of kaimes	Britain
1863	8,000,000	71.00	5,680,000	71.00	6.0	8.5	Repayment of debt	France
1865/1	6,000,000	66.00	3,960,000	66.00	6.0	9.1	Repayment of debt and deficit	France
1865/2	36,000,000	50.00	18,180,000	50.00	5.0	10.0	Repayment of 1854 loan	France, Britain
1869	22,200,000	54.00	12,000,000	54.00	6.0	11.1	Repayment of debt and deficit	France
1870	31,700,000	32.13	10,180,000	32.00	3.0	9.3	Rumeli Railway	Austria, Germany, Italy
1871	5,700,000	73.00	4,160,000	73.00	6.0	8.2	Budget deficit	Britain, France
1872	11,200,000	98.50	9,460,000	85.00	9.0	10.6	Budget deficit	Britain, Austria, Germany
1873/1	11,400,000	55.00	6,300,000	55.00	5.0	9.1	Consolidation of 1872 bonds	France, Britain
1973/2	27,800,000	54.00	15,000,000	54.00	6.0	11.1	Budget deficit	France
1874	40,000,000	43.50	17,400,000	43.00	5.0	11.5	Floating debt	France, Britain
1877	5,000,000	52.00	2,600,000	52.00	5.0	9.6	Finance 1877 Russian War	France
Total	228,000,000	64.89	122,720,000	63.56	5.63	9.15	Red color indicates figures are a	veraged

Source: Birdal (2010); calculations by the author

Notes: In 1860, the Ottoman Empire tried to raise a loan of £16,000,000 at 14% interest rate through the underwriter French banker Jules Mirès, but this attempt failed because the French government did not allow it to be quoted in the French stock market; as a result, Mirès was not able to get enough investors to invest With the death of the Sultan Abdülmecid in 1861, the brother Sultan Abdülaziz as successor and his government was able to secure a fresh loan of £8,000,000 in 1862. Things were turning positive for a change, Sultan Abdülaziz's Imperial Ottoman Bank took advantage of the returned investors' confidence to broker two new loans; £8,000,000 at 6% (1863) and £6,000,000 at 6%. The Ottoman Empire's indebtedness increased beyond control; during 1854-61, Sultan Abdülmecid agreed on loans totaling £15,000,000 (drawn £12,360,000). Sultan Abdülaziz, about the same time span as his brother (from 1862 to 1870), agreed on loans reaching £112,000,000.

In the first ten-year period (1854 to 1863), the Ottoman Empire barrowed from external sources a total of £31,000,000 (circa £2,000,000 of interest payment per annum); in the second eight-year period (1865 to 1872), with £112,000,000 the level of barrowing skyrocketed (i.e. five times more than the estimated £22,000,000 of annual revenues). The last spree of the Ottoman's barrowing before bankruptcy (1873 to 1877) climaxed, in just five years, the Empire secured loans stood at £84,000,000 (again four years' worth of tax and customs revenues were used to pay these massive loans). From 1865 to 1877 (13 years), the Ottoman Empire paid over £20,000,000 for interest expense. The Ottoman Empire was not able to survive under the heavy financial burden of the massive loans it contracted between 1854 and 1874; as a result, the Ottoman Empire financially collapsed (bankrupt) in October 1876. The war with Serbia and Montenegro in 1876 and with Russia in 1877 pulled plug on the Ottoman Empire; the ill man as Europeans called went into coma just prior to World War I (1914-18). Because the Ottoman Empire was not able to pay its outstanding external debt, creditors agreed to reduce the Ottoman's debt almost by 50%, from £228,000,000 (see Eldem, 2005).

The Ottoman Empire existed without a bank for over 600 years, foreign capital flowed via the Galata Bankers who were Greeks, Jews, and Armenians. Not only these bankers enjoyed 15% to 20% interest charged on short-term advances, but had extensive influence on Sultans; therefore, Europeans coined the term "Galata Vampires" since these bankers earned returns like sucking the blood of their clients (Birdal, 2010; Hulkiender, 2003; Kazgan, 1991). As illustrated in Table 1, these small types of banking operations were seen as utterly insufficient and inadequate to finance the Empire's ambitious efforts of modernization (Anderson, 1964; Blaisdell, 1929; Rodkey, 1930). In 1878 at the Congress of Berlin, France and Britain took control of the Ottoman debt which was halved through negotiations since the Empire was unable to pay even interest payments of the debt. Consequently, Sultan Abdülhamid II was forced to create the OPDA¹¹ in 1881 in order to administer war reparations and the Empire's outstanding foreign debt stock (Blaisdell, 1929; Guran, 2003; Kıray, 1995).

Table 2: Economic indicators of Turkey

	1880	1913	1929	1950	1980	2005
Population (million)	13	17	14	21	45	69
Share of urban population (%)	26	28	24	25	44	68
Share of agriculture in labor (%)	80	80	85	84	51	34
Share of agriculture in GDP (%)	54	55	42	54	26	11
GDP per capita ^a (\$)	850	1200	710	1620	4020	7500
-as % of W. Europe plus U.S.	37	29	16	24	25	30
-as % of developing countries	147	168		188	219	225
-as % of world	81	79		77	89	117
Life expectancy (years)		30		48	62	69
Literacy age 15+ (%)		10		32	69	89
Periods	1880-13	1914-29	1930-49	1950-79	1980-05	2005-25
Annual population growth (%)	0.8	-1.1	1.8	2.6	1.7	1.9
Annual GDP per capita growth (%)	0.8	0.0	3.1	3.1	2.5	2.9

Source: Altug et al. (2008); a PPP adjusted in 1990 \$USD

Mustafa Kemal Atatürk's Turkey started way behind in the race of global competitiveness¹² (as shown in Table 2, no skilled labor force, low literacy and high mortality); at this background, he was unable to develop an autonomous economic strategy. The vestiges of the Ottoman Empire and the treaties signed in the post-WWI with harsh terms¹³ forced Turkey to accept the Ottoman Empire's outstanding debt at a reduced rate; as such, 62% of the pre-1912 debt and 77% of the post-1912 debt¹⁴ (Caillard,

¹¹ OPDA (similar to the IMF) refers to the Ottoman Public Debt Administration.

¹² Atatürk realized that any type of factory to produce goods had to build by the government due to lack of skilled labor, resources, and potential investors; therefore, any sort of production was done by state-owned enterprises.

¹³ The Armistice of Mudros (October 30, 1918) was followed by the Treaty of Sèvres (August 10, 1920) which had the utmost objective of liquidating the Ottoman Empire and abolishing Turkish sovereignty, but it failed and was replaced by the Treaty of Lausanne (July 24, 1923); Turkey gave up Arab provinces, Cyprus, and Dodecanese, plus the Aegean Sea and the Black Sea were declared open to all shipping.

¹⁴ Turkey made its final debt payment on 25 May 1954.

1885; Çakır, 2001; Conte, 2014; Eldem, 1994). Atatürk's ambition to develop an economic policy was interrupted by the Great Depression of the 1930s, but he still put together a five-year plan comprising many government-initiative projects (Keynes, 1936)¹⁵ such as building railroads, setting up factories, establishing higher education institutions, and creating a central bank (Ahmad, 1993; Findley, 2004; Mango, 2000; Kedourie, 1989; Nas, 1992; Zurcher, 2004; Webster, 1939).

Atatürk observed how the Ottoman Empire struggled financially because it had no national banks¹⁶; as a result, its economy was besieged by heavy borrowings from France and England that ultimately put a tight leash on sultans (Blaisdell, 1929; Birdal, 2010; Caillard, 1894; Eken & Schadler, 2012; Önis, 2009; Eldem, 2005; Findley, 1986; Rustow, 1987). Even then, Atatürk knew it perfectly that Turkey's forward progress would be possible with the help of a national banking system not only capable of serving the young country's extensive and challenging financial needs, but enabling and fostering the development of crucial industries. For this exact reason, Atatürk wanted to create a true national bank to finance various domestic infrastructure projects; İş Bank, founded in August 1924, assumed this enormous task. Ziraat Bank¹⁷ (Agricultural Bank) primarily focused on serving the financial needs of farmers who are still a significant part of the Turkish economy (e.g. Marois & Güngen, 2016). Atatürk also ordered the name of the *Imperial Ottoman Bank* to be changed back to the *Ottoman Bank* and allowed it to remain as a state-owned bank with limited central bank functions until 1931 (Turkey's central bank was finally created in June 1930 but began its operation on October 3, 1931).

Almost a century after its creation, still whether Turkey's central bank (TCMB) is independent or it is acting under pressure is a hotly debated topic. The truth is, TCBM has never been independent (i.e. maybe briefly after 2001); President Erdogan's sacking of central bank governor Murat Cetinkaya on 6 July 2019 sent a strong signal, removing all doubts that TCMB was independent as long as the signals given by the executive presidency were included in monetary policy decisions. With Turkish economy bent to the president's will, and with TCMB's increasingly shaky monetary policy credibility, all risks (endogenous, exogenous, geopolitical and COVID-19 related) are tilted downside.

¹⁵ Monetarists like the influential British economist John Maynard Keynes argues in favor of government intervention during challenging economic times because sovereign states have resources large enough to create economic activity.

¹⁶ The Ottoman Empire never borrowed money from other nations until the Crimean War (1853-56); paper banknotes (Kaime) were printed in 1840, which later became worthless due to hyperinflation. For the repayment of war reparations and the Empire's outstanding external debts, Ottoman Bank (Ottoman Turkish: Bank-1 Osmanî) was established in 1856 with British capital and was headquartered in London. In 1863, the Ottoman Bank was restructured under the name of Imperial Ottoman Bank which was established by the Ottoman Empire in partnership with English-French financiers; the bank served as the Empire's Treasury with central bank functions.

¹⁷ The Homeland Funds was established in 1863, the name of which was changed to Ziraat Bank in 1888

¹⁸ Establishment of other important state-owned banks; Halkbank (May 23, 1938), Vakif Bank (January 11, 1954).

¹⁹ Atatürk initiated the establishment of a couple more new banks into the country's growing financial system; Sümerbank in 1932 and Etibank in 1935. Before the start of World War II, Atatürk's reforms helped Turkey create a financial sector of its own that provided necessary financial means to develop other vital industries.

2.1 Backsliding on Competitiveness

Since Mustafa Kemal Atatürk created the Republic of Turkey²⁰ from the ashes of an ill-Ottoman Empire, Turkey's economic progress has been robust (GDP 6% or more); however, its impressive performance has been disrupted by repeated military coups, chronic deficits, economic/financial crises, political turmoil arising from a confluence of domestic and external developments, and now the extraordinary cost impact of the Great Lockdown due to the devastating COVID-19 pandemic, which could potentially toss Turkey out of the G20 group as Turkey's GDP is forecast to contract at least 3% in 2020 (i.e. \$650 billion) – currently 20th (dropped 3 positions since 2016, see Table 3).

Table 3: G20 countries

Rank	Country	Last	Previous	Date	Unit
1	United States	21200	20544	Dec/19	USD Billion
2	China	14200	13608	Dec/19	USD Billion
3	Euro Area	14000	13670	Dec/19	USD Billion
4	Japan	5110	4971	Dec/19	USD Billion
5	Germany	4040	3997	Dec/19	USD Billion
6	United Kingdom	2910	2855	Dec/19	USD Billion
7	France	2890	2778	Dec/19	USD Billion
8	India	2800	2719	Dec/19	USD Billion
9	Italy	2030	2074	Dec/19	USD Billion
10	Brazil	2020	1869	Dec/19	USD Billion
11	Russia	1750	1658	Dec/19	USD Billion
12	Canada	1740	1709	Dec/19	USD Billion
13	South Korea	1690	1619	Dec/19	USD Billion
14	Spain	1460	1426	Dec/19	USD Billion
15	Australia	1450	1432	Dec/19	USD Billion
16	Mexico	1200	1221	Dec/19	USD Billion
17	Indonesia	1126	1042	Dec/19	USD Billion
18	Netherlands	951	913	Dec/19	USD Billion
19	Saudi Arabia	785	782	Dec/19	USD Billion
20	Turkey ↓	740	767	Dec/19	USD Billion
21	Switzerland 1	715	706	Dec/19	USD Billion

Source: Trading Economics; https://tradingeconomics.com/country-list/gdp?continent=g20

Like President Erdoğan, Prime Minister Adnan Menderes in the 1960s argued that the IMF wanted to put a rein (a leash) on Turkish government by making international borrowing scarce and costly. The IMF opposition gained popularity with Turkish voters who helped Menderes' party win the elections in 1954 and 1958; paradoxically, the partially accepted IMF program in 1958 also brought the DP's

²⁰ Mustafa Kemal's well-organized resistance army was victorious in the War of Independence (1919-1923). Subsequently, armies of Allied forces were expelled from the occupied Turkish land; Mustafa Kemal famously said "they will go as they came"; he abolished the Ottoman Empire in 1922 by overthrowing Sultan Mehmet VI Vahdettin and established Turkish Republic on October 29, 1923. Mustafa Kemal was elected as the first President in 1923 and the Grand National Assembly of Turkey (TBMM) honored him with the title (last name) Atatürk in 1934 which means the "Father of the Turks".

demise²¹ and the subsequent military coup on May 27, 1960 (see Conway, 2007; Joyce, 2006; Singer, 1977). There were four more military interventions, in 1971, 1980, 1997, and 2016 but the latter two were different from the former three. The coup of 1997 was called a "soft coup" because the Turkish military did not take full control of the government, instead put immense pressure on Prime Minister Necmettin Erbakan and his party to resign, the closure of which paved the road for the establishment of the current ruling Justice and Development Party (AKP) in 2001. The failed coup in 2016 was called "an attempt" because it was not a full-fledged military takeover, mainly an uncoordinated (sloppy) act by a fraction of military forces that did not follow a complete (top-to-bottom) chain of command. Every decade starting with the 1960s had extraordinary events that forced Turkey to go backward for a decade or two in terms of economic and social development performance (Table 4).

Table 4: GDP and GDP per capita annual growth

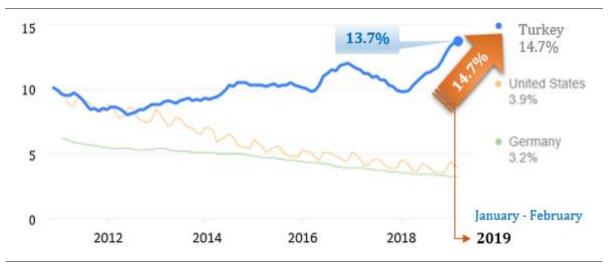
Date	Annual GDP \$ million	GDP Growth %	Date	GDP Per Capita \$	GDP P.C. Annual Growth %
2019	771,274	0.9	2019	8,958	-4.75
2018	771,400	2.8	2018	9,405	-10.9
2017	852,648	7.5	2017	10,551	-2.5
2016	863,390	3.2	2016	10,817	-0.9
2015	859,449	6.1	2015	10,915	-9.2
2014	934,075	5.2	2014	12,022	-3.0
2013	950,328	8.5	2013	12,395	7.3
2012	873,696	4.8	2012	11,553	3.7
2011	832,497	11.1	2011	11,141	6.4
2010	772,290	8.5	2010	10,476	17.9
2009	644,470	-4.7	2009	8,882	-16.9
2008	764,643	0.8	2008	10,692	11.8
2007	675,010	5.0	2007	9,563	21.1
2006	550,796	7.1	2006	7,899	8.5
2005	501,163	9.0	2005	7,278	22.3
2004	404,853	9.6	2004	5,953	28.2
2003	311,944	5.6	2003	4,643	29.4
2002	238,342	6.4	2002	3,589	17.6
2001	200,305	-6.0	2001	3,053	-27.6
2000	273,085	6.6	2000	4,219	5.0
1999	256,485	-3.4	1999	4,019	-8.4
1998	276,012	4.6	1998	4,387	4.0
1997	261,775	7.5	1997	4,221	3.1
1996	250,263	7.0	1996	4,096	5.6
1995	233,340	7.2	1995	3,877	28.2
1994	179,208	-5.5	1994	3,024	-29.0

Source: Countryeconomy.com; https://countryeconomy.com/gdp/turkey

²¹ Following the May 27, 1960 military coup, both President Celal Bayar and Prime Minister Adnan Menderes were arrested and found guilty by the military court. Celal Bayar, longest lived state leader (1883-1986), was Prime Minister (1937-39) and President (1950-60) was sentenced to life imprisonment, but he was released in 1964 due to poor health and pardoned in 1966. Unfortunately, Prime Minister Menderes was not as lucky, who was sentenced to death by hanging. Menderes did not do anything wrong or unlawful to deserve the death penalty. Many years later, the Turkish government apologized for its shameful decision, regardless murdering its prime minister by hanging remains as one of the darkest days in history.

Turkey's economic performance since its most severe economic crisis of 2001 has been remarkable; this impressive record in part was attributable to the non-coalition government under the Justice and Development Party that has won 16 elections since 2002 (President Erdoğan is a founding member), ambitious structural and fiscal reforms, accommodative external environment (i.e. dollar glut due to the Fed's expansive monetary policy along with the historically low interest rates in the U.S.), EU-accession negotiations, and the AKP's fruitful economic stimulus programs (see Önis, 2009; Raina & Bakker, 2003). However, adverse effects of the influx of about 4.5 million refugees (i.e. 3.6 million from Syria), growing economic vulnerabilities arose from increased tensions between the U.S. and Turkey, and the currency crisis in August 2018 contributed to the AKP's stinging defeats in the 2019 mayoral elections; consequently, for first time since the local elections of 27 March 1994 (Erdoğan was elected Mayor of Istanbul), the opposition party (Cumhuriyet Halk Partisi – CHP) won Istanbul.

A deluge of monetary and fiscal reforms between 2002 and 2009 have fueled a broad rally in Turkish economy; however, in the past few years (since 2013), exogenous (hostile external environment) and endogenous (deficits and political turmoil) risks reversed two decades of progress made to date. ²² For example, the GDP per capita in Turkey has dropped for six consecutive years, from \$12,395 (peak) in 2013 to \$8,958 in 2019 (i.e. 2006 level); furthermore, the impact of the coronavirus crisis (i.e. Great Lockdown beginning in mid-March, i.e. 9 weeks of partial lockdowns enforced on the weekends and national holidays) will cause the Turkish economy to contract 3% or more in 2020 (downgraded from +3.9% growth); as a direct consequence of the AKP's poor performance in GDP growth (Figure 3) and job creation (Figure 2), Turkish people are a lot poorer now than they were in 2013.

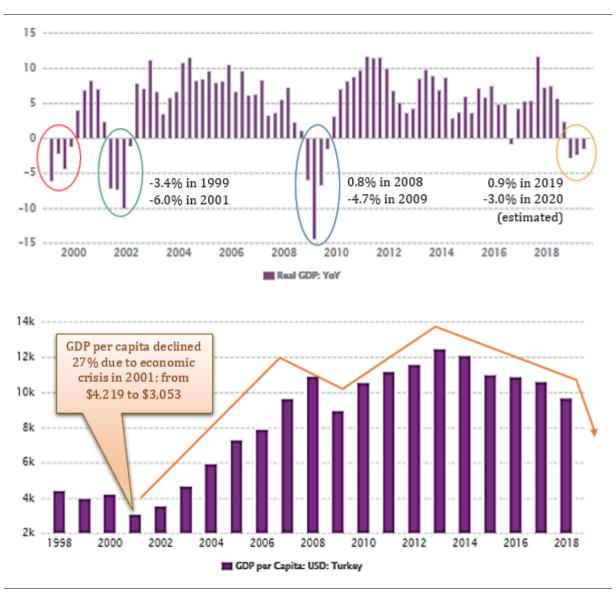


Source: World Bank; http://datatopics.worldbank.org/world-development-indicators/

Figure 2: Turkey unemployment rates (2012-2018)

²² https://www.worldbank.org/en/country/turkey/overview

Turkey's risk premia has risen rapidly following the 2016 failed military coup attempt and climaxed in the aftermath of the currency shock in August 2018, the amplified risk premia severely impacted every area in Turkish economy which has been on a roller-coaster ride in terms of interest rates and inflation. In October 2018 (Figure 4), core inflation (CPI) hit 25% while producer price index reached 50%; similarly, interest rates hit the roof; 36% for commercial loans, 28% for housing loans, and as high as 24% for bank deposits in lira. After several rigorous monetary easing actions by the Turkish central bank (TCMB), the policy rate was cut from 24% in June 2019 to 8.75% in April 2020; same way, the core inflation declined to 8.6% in October 2019 after peaking at 25% a year ago, however severe impact of COVID-19 pandemic has triggered a spike in inflation (over 12% in February 2020).



Source: World Bank; https://www.ceicdata.com/en/indicator/turkey/gdp-per-capita

Figure 3: Turkey real GDP (%) and GDP per capita (\$)



Source: TCMB – Turkish Republic Central Bank

E. Short-Term External Debt Statistics (Billion \$)

https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Statistics/Chart+Gallery

Figure 4: Various economic indicators of Turkish economy

F. Interest Rates for Banks' Loans and Deposits (%)

During a century of history as an independent state following Ottoman Empire's dissolution (1299-1922), the Republic of Turkey (since 1923) has endured many obstacles, challenges, and paradigm-shifting crises that often led to a military coup or vice versa (Table 5, also see Figure 3 and 4).

Table 5: Turkish history of unprecedented events

Event	Economic/Social Developments	Outcomes
1	Severe economic recession; socio-political turmoil; American aid ran out, Marshall Plan ended and Prime Minister Adnan Menderes approached Moscow for lines of credit; May 27, 1960 the Turkish armed forces took control (coup); president (Celal Bayar) and prime minister Adnan Menderes among others were arrested and prosecuted for charges of high treason; Celal Bayar was sentenced to life imprisonment and Adnan Menderes was sentenced to death by hanging.	Economic recession, violence, instability; military coup on May 27, 1960; prime minister Adnan Menderes was executed by hanging (Sept. 16, 1961); IMF stand-by program was signed in 1961; on July, 1961 constitutional referendum was held which replaced one from 1924; two failed coup attempts in 1962 and 1963.
2	The extreme Islamist movement turned into a state of chaos In the early 1970s; public disorder and political terrorism grew substantially; the Chief of Turkish Armed Forces handed prime minister Süleyman Demirel a memorandum (March 12, 1971) known as 'coup by memorandum'; ongoing and severe clashes between left-wing and right-wing groups who often carried out bombing attacks and violent acts; the extreme Islamist movement rejected Atatürk and his principles.	Socio-political turmoil grew in the 1970s; Prime Minister Süleyman Demirel's Justice Party lost parliamentary majority as some members defected to form own groups; a new wave of terror led to martial law and repression; the military memorandum of 1971 ousted prime minister Demirel and set the stage for another coup in 1980.
3	Süleyman Demirel succeeded Bülent Ecevit as prime minister in 1975 formed a coalition government (4 different parties); amplified economic/social problems and the ensuing extreme violence in the late 1970s; The 1980 coup d'état was welcome to restore order and stop the ongoing socio-political violence since the 1960s; National Security Council was in charge of the government from 1980 to the 183 general election;	The 1980 coup (September 12) overthrew the government and issued a martial law; all political parties and trade unions were banned; the constitution was suspended; the economy was on the verge of collapse, high unemployment, deficits, and inflation, but improved in second half of the 1980s.
4	Negative impacts of the 1991 Persian Gulf War and embargos placed by the UN cost the Turkish economy between \$3 and \$5 billion; favorable ratings by the US credit rating agencies in 1992 and 1993; short-term debt increased significantly which caused a huge rise in dollarization; the government requested about \$1 billion from the IMF; unresolved economic problems resulted in a currency crisis.	Unresolved economic problems, political turmoil, social unrest, and ineffectiveness of the coalition government, (Tansu Çiller was Prime Minister, 1993–1996) led to the 1997 military memorandum (28 February also called 'Post-modern coup'). Erbakan's Welfare Party was closed.
5	Political instability increased immensely after the 1997 post-modern coup; the massive Marmara earthquake in 1999 only made the matter worse (over 18,000 people died); Prime Minister Ecevit, after meeting with President Nejdet Sezer, characterized the meeting as "a serious crisis" this prompted a panic-induced heavy sell-off in stock market.	The economic crisis of 2001 was the worst in Turkish history (GDP contracted 6%); central bank's foreign reserves declined by \$5 billion; several banks became insolvent or bailed out; Turkish lira depreciated at least 50%; 15,000-20,000 jobs were lost.
6	Turkey's remarkable economic performance since 2002 (6% YoY GDP growth) was halted by the 2008 global financial crisis originated in the U.S.; President Erdogan's remarks at the 2009 Davos and his repeated criticism of the IMF had a straining effect on Turkey's relations with its neighboring countries.	Severe recession; augmented geopolitical risks caused a huge fall in foreign demand; unemployment rate rose by 5%; industrial production fell about 50% and the GDP contracted by -4.7% (worst since 2001).
7	Strained Turkey-Cyprus relations as Cyprus vetoed chapter 15 of Turkey's EU accession negotiations; conviction of the U.S. pastor Andrew Brunson of terrorism charges and taking part in the 2016 failed coup attempt; Turkey's purchase of Russian S-400 defense system; removal of Turkey from F-35 program.	The U.S. imposed sanctions/tariffs on steel imports from Turkey; repeated attacks on Turkish lira resulted in a severe currency crisis; the value of lira plummeted against the dollar (see Figure 4 on next page).

2.2 Backsliding on Democracy

Turks²³ have been around for 4000 years, who established many states and empires²⁴ in the "land of Turks" referring to Anatolia (Asia Minor) and Eastern Thrace (European part of Turkey)²⁵. However, the key elements of democracy has been arcane to Turks until Mustafa Kemal (a brilliant man, superb military commander, genius, and envied politician/president) ended over six centuries-long Ottoman rule. His well-organized resistance army was victorious in the War of Independence (1919-1923), the armies of Allied forces were expelled; subsequently, Mustafa Kemal abolished the Ottoman Empire in November 1922²⁶ by overthrowing Sultan Mehmet VI Vahdettin and established Turkish Republic on October 29, 1923 (The Grand National Assembly elected Mustafa Kemal as President in 1923).²⁷

The life of Turks, previously in the Altai Mountains of western Mongolia, commenced in the interior of Asia Minor (modern Turkey) when Seljuqs defeated the Byzantines at Manzikert in 1071 (Malazgirt in Turkish), which also meant the start of Turkification of Asia Minor. The successor Ottomans (tribal leader and founder Osman I) established the Ottoman Empire (1299-1922) that conquered lands in Southeastern Europe, Central Europe, Western Asia, and Northern Africa. However, after 623 years of strict Ottoman rule, Turkey's transition from sultanate to democracy in the 20th century was rather painful, underpinned by developments in the aftermath of Atatürk's death (November 10, 1938); as such, chronic socio-political turmoil, repeated military interventions (coup d'état), and the spin-off crises (financial, economic, currency, and societal). Although not a full-fledged democracy, to start the process, Atatürk formed the Republican People's Party (Cumhuriyet Halk Partisi - CHP in Turkish) in 1923 which inaugurated the single-party era (e.g. Rustow, 1957; Harris, 1965).

Mustafa Kemal Atatürk's closest associate Ismet Inönü became president after his death in 1938, but the timing could not have been any worse. Although Turkey stayed neutral, the outbreak of World War II (1939-45) triggered a surge in Turkey's military spending which rose from 25% to 60% of the government budget. By the conclusion of WWII, Turkish economy was in severe recession; per capita income and agricultural output fell circa 30%, inflation skyrocketed (as high as 300%), and 80% of the Turkish lira's value depreciated against major currencies during 1938-45 (see Altug et al., 2008;

²³ Turkic refers to Turkish people, Azerbaijanis, Uzbeks, Kazakhs, Turkmens, Kyrgyz and Uyghur people.

²⁴ The Great Hun Empire (370s-469), the Göktürk Empire (552-740), the Uygur Empire (741-840), the Avar Empire (600-900), the Hazar Empire (500-1000), the Great Seljuk Empire (1040-1157), and the Ottoman Empire (1299-1922).

²⁵ Wikipedia, https://en.wikipedia.org/wiki/History_of_Turkey

²⁶ The Grand National Assembly of Turkey on 1 November 1922 ended the Ottoman Empire, which was recognized on 11 November 1922 at the Conference of Lausanne.

²⁷ The last sultan, Mehmed VI Vahdettin (reigned 1918–22), was forced to leave the country on 17 November 1922.

²⁸ Countries that were once under the Ottoman rule. Bulgaria, Egypt, Greece, Hungary, Jordan, Lebanon, Israel and the Palestinian territories, Macedonia, Romania, Syria, parts of Arabia, the north coast and the horn of Africa.

Boratav, 2009). Economic problems of the war years and the capital levy²⁹ introduced by the Inönü administration to raise money to meet the country's debt obligations took a heavy toll on his political career prospects (Akın, 2002; Albayrak, 2004; Kibritçioğlu, 2001; Nas, 2008). Consequently, the CHP's single-party dominance³⁰ took a major blow in the 1946 general election; Democrat Party (DP) also founded in 1945 won 61 seats (e.g. Karpat, 1959; Weiker, 1975), but the transition into a multi-party political system commenced strongly when the DP won 396 out of 487 seats (i.e. claimed 54% of the votes) in the 1950³¹ general election; Celal Bayar³² became President and Adnan Menderes became Prime Minister (Lipovsky, 1991; Szyliowicz, 1966; Schick & Tonak, 1987; Özbudun, 1976).³³ However, Menderes and his party became the target of international aggression campaign as he rejected the IMF's politically motivated policy advice and accused the IMF for its recidivism and contractionary measures (Bas & Stone, 2010; Bird et al., 2004; Conway, 2007; Joyce, 2006; Singer, 1977).³⁴

September 16, 1961 was the darkest and most shameful day in Turkey's young history of transition to democracy; following the 1960 coup d'état (May 27), the Turkish Prime Minister Adnan Menderes along with his two ministers Hasan Polatkan and Fatin Rüştü Zorlu were executed by hanging.³⁵ It is true that, since the Justice and Development Party (AKP) won the general elections in 2002 (party's leader Recep Tayyip Erdoğan became prime minister), Turkey has moved away from its tradition of facing one military coup in every decade since the 1960s (excluding the July 2016 failed coup attempt by a fraction of the arm forces); but given Turkey's current government's ever more authoritarian rule, it is hotly debated whether the past two decades of democratic and economic developments have been more damaging or beneficial.³⁶ The ruling AKP's promise of making solid reforms left its place to more dictatorial/dysfunctional politics and laws that have been purposely designed to suppress the citizens of Turkey; consequently, once highly praised AKP (i.e. democratic progress, EU accession negotiations, growth in GDP and GDP per capita) is now immensely criticized.

²⁹ At the time of capital levy (1942), mostly non-Muslim people (Greeks and Armenians) and Jews who converted to Islam had taxable wealth, but this was seen as a punitive punishment and angered these communities. Turkey was not alone, many European countries introduced capital levies during or after both WWI and WWII.

³⁰ CHP's policies were based on Mustafa Kemal's six principles which were also basis of Turkey's first constitution written in 1937; republicanism, nationalism, populism, statism, secularism, and revolution.

³¹ In the 1950 elections, Democrat Party (DP) won 396 of 487 seats compared with only 68 seats won by CHP.

³² Celal Bayar, longest lived state leader (1883-1986), was Prime Minister (1937-39) and President (1950-60). On 27 May 1960 coup, along with Prime Minister Adnan Menderes, President Celal Bayar was sent to military court which convicted him to life imprisonment. He was released in 1964 due to poor health and pardoned in 1966.

³³ Prime Minister Adnan Menderes was arrested, prosecuted and sentenced to death. Menderes did not do anything unlawful to deserve the death penalty. Many years later, the Turkish government apologized for its decision.

³⁴ The military coup of 1960 marked the IMF rein on Turkey's economy. There were two more coups in 1971 and 1980, and the most recent coup attempt on July 15, 2016 by a fraction of the Turkish Armed Forces.

³⁵ At the time of writing this article, the Turkish Parliament on 23 June 2020 unanimously passed a bill to make the Yassiada trials and the related decisions void; however, declaring the event and the decisions taken in 1960 invalid will neither undo the history nor will it remove the shameful stain deeply engraved in Turkey's premature democracy.

 $^{^{36}\,}https://www.brookings.edu/research/the-rise-and-fall-of-liberal-democracy-in-turkey-implications-for-the-west/$

There have been numerous endogenous (internal) and exogenous (external) factors that contributed to Turkey's backslide on democracy, i.e. due to acrimonious relations with European and the Middle Eastern neighbors (especially since Prime Minister Erdoğan walked off the stage at the 2009 Davos summit over clash in Gaza and accused Israeli President Shimon Peres and his country for engaging in inhumane treatment of Palestinians), all of the democratic gains achieved early on have vanished completely (see Table 3 for a brief history of unprecedented events in Turkey). Table 6 illustrates a list of internal and external factors that have contributed to Turkey's democratic regression.

Table 6: Internal and external factors for Turkey's backsliding on democracy

Endogenous - internal factors37

Exogenous - external factors

- Chronic deficits; budget, current account, trade.
- High inflation, interest rates, and weak currency.
- Political turmoil due to many coalition governments; four between 1973 and 1980 and seven 1991 and 2002.
 Only four single-party governments; Democratic Party (1950-1960), Justice Party (1965-1971), Motherland Party (1983-1991), and Justice and Development Party (2002-present); most dictatorial/authoritarian so far.
- Repeated military coup d'état and memorandum; 1960, 1971, 1980, 1997, and 2016.
- Negative developments; rule of law, human rights, basic fundamentals, and the Judiciary/legal system.
- Turkey's cross-border military operations in Syria, Iraq, Libya, and counter-terrorism against PKK.
- Fast deterioration in fundamental freedoms since the July 15, 2016 failed coup attempt by a fraction of the arm forces, and an increase in detentions, dismissals, powers of the government through authoritarian rule.
- Constrained civil, political, and defense rights; expanded powers for the police and state prosecutors.
- Decrees issued during the state of emergency are not open to review; ineffective domestic legal remedy led to the rejection of thousands of complaints.
- Due to administrative obstacles, still a great number of people are detained without indictment.
- Countless civil society and rights-based organizations have been closed without any legal remedy.
- The new presidential system centralized power in the hands of one man (i.e. President Erdogan).
- The Parliament's legislative and oversight functions have been severely curtailed (almost symbolic now).
- Political polarization and marginalization of opposition parties (i.e. HDP) have increased significantly.
- Democracy is exercised on an unequal basis as the media is hugely controlled by the AKP government.
- The March 2019 municipal elections were annulled and the elected mayors were declared ineligible to run office.
- Politicization of the public administration.

- Geopolitical risks due to growing diplomatic tensions are on the rise and their negative impact on Turkish economy has been more significant than ever before.
- Geopolitical conflicts Turkey has engaged in have set a climate of uncertainty, this has caused international investors to hold back investments, which are crucial for Turkey's development programs.
- Due to acrimonious relations with most neighbors (especially with the U.S.), democratic gains achieved for the past two decades (since 2002) have eroded, the hindered economic growth left its place to contraction, and EU accession negotiations are ground to a halt.
- Unstable geopolitical situation in Syria, Iraq, and Iran forced nearly 4 million refugees to migrate to Turkey, which put immense pressures on its already fragile economy; the government claims that it has spent over \$40 billion on refugees.
- The EU suspended the opening of eight chapters on Customs Union (Dec. 2006); the negotiations will not resume until Turkey opens its ports (sea and air) to Greek-Cypriot traffic.
- Turkey-Cyprus relations were severely strained when France and Cyprus unilaterally blocked chapters, and in December 2009, Cyprus vetoed the opening of the chapter 15 related to energy.
- Massive costs of the coronavirus crisis will surge with the potential second or third wave of the COVID-19 insurgence (i.e. the cost could be \$50 billion).
- Arrest, prosecution and conviction of the U.S. pastor Andrew Brunson of terrorism related charges and taking part in the 2016 failed coup attempt
- A massive financial tsunami (currency crisis) hit Turkish economy (Aug. 2018), lira depreciated more than 50% against major currencies.
- All economic indicators in Turkey have recorded their worst levels. Turkish economy is forecast to contract -3% or more in 2020. While no IMF in Turkey's future, a severe economic crisis is imminent.

³⁷ Commission Staff Working Document: Turkey 2019 Report. European Commission, Brussels, 29.5.2019, SWD(2019) 220 final (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2019 Communication on EU Enlargement Policy. COM (2019) 260 final).

3.0 Methodology

The World Economic Forum (WEF) defines global competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of an economy, which in turn sets the level of prosperity that the economy can achieve". A wide spectrum of ways a country's competitiveness is measured, but analyses in this study are based on the Global Competitiveness Index (GCI) published by the WEF annually, which tracks 114 indicators grouped into 12 pillars (see Figure 5) that are then organized into three sub-indexes (see Table 7); (1) basic requirements; (2) efficiency enhancers; (3) innovation/sophistication factors. The GCI includes statistical data from multilateral organizations such as the International Monetary Fund (IMF), World Bank, UNESCO, World Health Organization (WHO), and International Telecommunication Union (ITU). The WEF underlines that each nation provides own data (i) as is, as available; (ii) makes no representation to the accuracy of the data; and (iii) accepts no liability for any use of the data or any decisions or actions based on it.

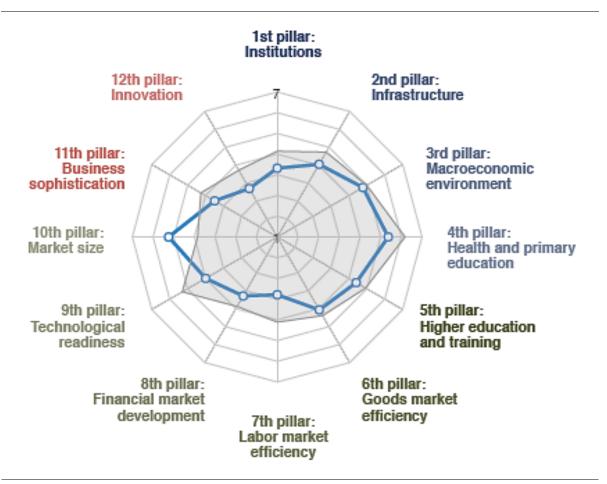


Figure 5: Global competitiveness index pillars

Table 7: List of variables and sample data points

Sub-index	Pillars	Definition	Data Points
	GCIOR	Global Competitiveness Index Overall Rank	114
BR	BRINS BRINF BRMEE BRHPE	Basic Requirements Institutions Infrastructure Macroeconomic environment Health and primary education	45 21 9 5 10
EE	EEHET EEGME EELME EEFMD EETRD EEMAS	Efficiency Enhancers Higher education and training Goods market efficiency Labor market efficiency Financial market development Technological readiness Market size	53 8 16 10 8 7 4
IS	ISBUS ISINN	Innovation and Sophistication Factors Business sophistication Innovation Total Data Points	16 9 7

Source: World Economic Forum (WEF); https://www.weforum.org/

3.1 Research Sample

The World Economic Forum does not compile the country-specific data employed to calculate country scores for the purpose of its GCI report; various parties within each country compile the data and then provide it to the WEF; however, for some data the WEF may be the source. For our analyses purposes throughout the study, we have extracted GCI data for 32 nations (Turkey, G19 excluding EU as a single economy³⁸, G8³⁹, and ASEAN-5⁴⁰). The sample data for this research comprised 114 rankings per year for ten years from 2009 to 2018 (see Table 7); a total of 1,140 rankings per country were analyzed; since the study compared GCI scores of Turkey with those of G19, G8, and ASEAN-5 countries, thus the final sample size was 36,480 (i.e. 114 x 32) ranking points grouped into 12 pillars.

3.2 Data Processing

After the data collection was completed, the data was subject to data screening. There was no missing data, therefore no missing data imputation was necessary. Next, univariate and multivariate outliers were investigated using Z-score and Mahalanobis D² values. Because there were no extreme outliers

³⁸ G19: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea Republic, Mexico, Russian Federation, Saudi Arabia, South Africa, Turkey, United Kingdom, and United States.

³⁹ G8: Canada, France, Germany, Italy, Japan, Russian Federation, United Kingdom, and United States.

⁴⁰ ASEAN-5: Indonesia, Malaysia, Philippines, Singapore, and Thailand.

based on Z-scores with greater than 4 and significant Mahalanobis D², no record was eliminated. The final sample size was 340.

3.3 Descriptive Statistics

The summary of the descriptive statistics of the variables is presented in Table 8. The results showed that the mean value of GCIOR was 27.22 ± 23.26 , BR was 33.32 ± 28.37 , EE was 26.18 ± 20.84 , and IS was 26.71 ± 22.49 . The summary statistics of the twelve-pillars were also included in the table.

Table 8: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
GCIOR	27.22	23.26	1	106
BR	33.32	28.37	1	110
BRINS	41.13	36.88	1	143
BRINF	31.14	26.90	1	105
BRMEE	46.57	35.46	1	138
BRHPE	37.38	33.06	1	135
EE	26.18	20.84	1	97
ЕЕНЕТ	31.91	26.48	1	93
EEGME	37.41	34.40	1	145
EELME	49.56	42.27	1	144
EEFMD	38.51	34.65	1	133
EETRD	34.57	29.27	1	121
EEMAS	24.20	22.94	1	130
IS	26.71	22.49	1	108
ISBUS	26.42	22.77	1	119
ISINN	28.21	24.24	1	111

Source: Author

3.3 Panel data analysis

This section employed country-year panel data. Initially, the proposed hypothesis were tested using the panel data regression analysis through models are shown below. Before attempting the analysis, the multicollinearity issue was tested. Due to the expected high multicollinearity among independent variables, the independent variables were not included in the regression analysis simultaneously. The variance inflation factor (VIF) values of the models ranges between 1.14 and 6.44 which are far below than the threshold value of 10. As a result, there were no multicollinearity between the independent variables. The proposed models are listed below, the objective is to determine;

Model 1: GCIOR_{it} = $\beta_0 + \beta_1$ BR_{it} + β_2 EE_{it} + β_3 IS_{it} + ϵ

Model 2: GCIOR_{it} = $\beta_0 + \beta_1$ BRINS_{it} + β_2 BRINF_{it} + β_3 BRMEE_{it} + ϵ

Model 3: GCIOR_{it} = β_0 + β_1 EEHET_{it} + β_2 EEGME_{it} + β_3 EELME_{it} + β_4 EETRD_{it}+ β_5 EEMAS_{it}+ ϵ

Model 4: GCIOR_{it} = β_0 + β_1 ISBUS_{it} + β_2 ISINN_{it}+ ϵ

 Table 9: Fixed –Effects model panel data analysis

Independent variables	Model 1 GCIOR	Model 2 GCIOR	Model 3 GCIOR	Model 4 GCIOR
		delok	ddioit	delor
BR	0.37*** (16.90)			
EE	0.24***			
	(7.66)			
IS	0.45*** (17.12)			
BRINS		0.34*** (14.07)		
DD.11/17				
BRINF		0.25*** (7.15)		
BRMEE		0.092***		
		(7.75)		
ВКНРЕ		0.12*** (3.92)		
ЕЕНЕТ			0.19***	
			(4.91)	
EEGME			0.21***	
			(6.24)	
EELME			0.022	
			(0.97)	
EEFMD			0.14*** (6.55)	
CC#DD				
EETRD			-0.018 (-0.48)	
EEMAS			0.15	
			(1.57)	
ISBUS				0.45**
				(11.56)
ISINN				0.30** (10.12)
	0.17	0.70**	2 = 2	
Constant	-3.45*** (-4.47)	-3.50** (-2.21)	3.78 (1.51)	6.76** [*] (7.62)
N A N Do	340	340	340	340
Adj. <i>R</i> ² F-stat	0.833 574.15***	0.588 130.03***	0.388 42.25***	0.611 283.57***

To start with, the pooled OLS and Fixed-Effects (FE) model were compared using F-test. The results indicated the FE model to be chosen (F-test = 23.03/df= 33/303; p-value=0.001). In addition, in order to decide between fixed or random effects model, Hausman test was performed; the key test results showed that fixed effect model is the most appropriate compared to random effects model (Hausman test: χ^2 (3): 19.52, p-value: 0.001). To eliminate the first-order serial correlation in the estimation, fixed-effect panel analysis with a Cochrane-Orcutt procedure on the data was employed. The results illustrated in Table 9 show the fixed-effects model coefficients with their corresponding t-statistics.

The results indicated that BR, EE, and IS had a significant positive impact on GCIOR a 1% significance level (Model 1). In addition, the effect of four-sub-dimensions of basic requirements, which are BRINS, BRINF, BRMEE, and EEHET, had a significant positive association with GCIOR at 1% significance level (Model 2). In model 3, only EEHET, EEGME, and EEFMD have a significant positive impact on GCIOR while EELME and EETRD had no significant impact on GCIOR at 5% significance level. Finally, the sub-dimension of IS (ISBUS and ISINN) were also significantly positively associated with GCIOR at 1% significance level based on Model 4.

3.4 Comparison Tests

In order to investigate whether the gap between Turkey and the countries in G8, ASEAN-5, and G19 have widened or narrowed in terms of financial stability during 2009 - 2018, a comparison test was employed. In this analysis, the mean GCIOR values of Turkey were compared with those of G8, ASEAN-5 and G19 countries using one-way ANOVA with Scheffe multiple-comparison test.

Table 10: GCIOR for G8 countries and Turkey during 2009 - 2018

Country	Mean	Std. Dev.	Freq.	Δ(Turkey-G8)
Turkey	53.5	7.56	10	-
Canada	12.6	2.22	10	40.9***
France	19.7	3.13	10	33.8***
Germany	5.4	1.07	10	48.1***
Italy	45.8	3.01	10	7.7
Japan	8	1.49	10	45.5***
Russian Federation	55.3	10.68	10	-1.8
United Kingdom	9.9	1.97	10	43.6***
United States	3.5	1.78	10	50***

Source: Author; *p<.05; **p<.01; ***p<.001 by ANOVA Scheffe multiple-comparison test

The mean GCIOR of Turkey was compared with G8 countries, the results are shown in Table 10. The one-way ANOVA analysis was performed in order to determine the significance of the differences

between Turkey and G8 countries. The table shows the key results comprising the average, standard deviation and the mean difference between Turkey and the G8 countries of GCIOR. Based on the analysis, the results indicate that Turkey's mean GCIOR value is statistically significantly higher than those of Canada, Germany, France, Japan, and the United Kingdom (p < .001). Even though Turkey's mean GCIOR score is higher than that of Italy, the difference is not statistically significant (p > .05). Finally, the mean GCIOR value of Russian Federation is a little bit higher than that of Turkey, however this difference is also not statistically significant (p > .05).

Table 11: GCIOR for ASEAN-5 countries and Turkey during 2009 - 2018

Country	Mean	Std. Dev.	Freq.	Δ(Turkey-ASEAN5)
Turkey	53.5	7.56	10	-
Indonesia	43.5	7.58	10	10
Malaysia	22.7	2.58	10	30.8***
Philippines	65.4	13.71	10	-11.9**
Singapore	2.6	0.97	10	50.9***
Thailand	35.1	2.88	10	18.4***

Source: Author; *p<.05; **p<.01; ***p<.001 by ANOVA Scheffe multiple-comparison test

Similarly, Table 11 shows the comparison test results of mean GCICOR based on one-way ANOVA between ASEAN-5 countries and Turkey. The results indicate that the mean GCIOR value of Turkey is statistically significantly higher those of Singapore, Malaysia, and Thailand at 1% significance level. Furthermore, Philippines' mean GCIOR value is statistically significantly higher than that of Turkey at 5% significance level. Although Turkey's mean GCIOR values are higher than that of Indonesia, but this difference is not statistically significant (p-value > .05).

Finally, the mean GCIOR value of Turkey and G19 countries were compared using one –way ANOVA with Scheffe multiple – comparison test. The results were presented in Table 12, which indicate that the mean GCIOR of Turkey is statistically significantly higher than those of Australia, Canada, China, France, Germany, Japan, Korea Republic, Saudi Arabia, United Kingdom, and United States (p < 0.01) while mean GCIOR of Argentina is statistically significantly higher than that of Turkey (p < 0.05). Even though the mean GCIOR of Turkey is higher than those of India, Indonesia, Italy, and South Africa, however the differences are not statistically significant (p > 0.05). Similarly, even though the mean GCIOR of Brazil, Mexico, and Russian Federation are higher than that of Turkey, but the differences are not significant (p > 0.05). For more detailed results of the analyses, see Figures 6, 7, and 8; plus more comprehensive tables with complete results are provided in the appendix.

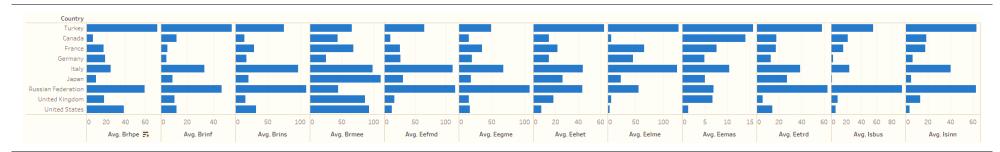


Figure 6: Turkey and G8

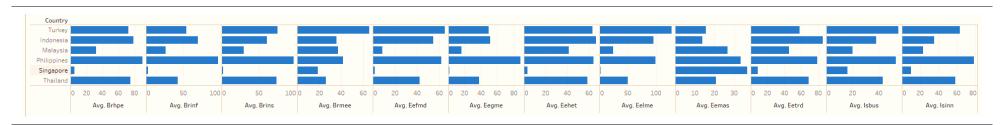


Figure 7: Turkey and ASEAN-5

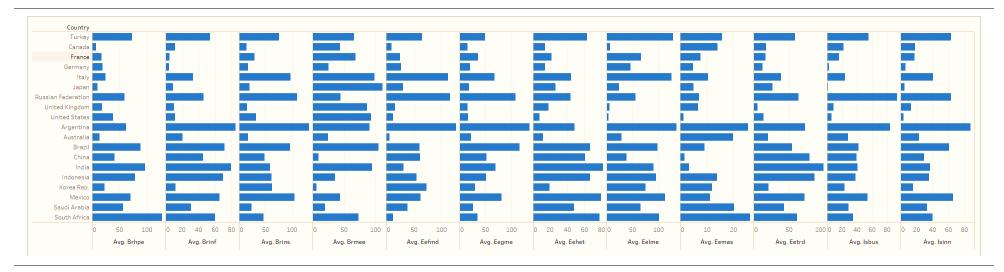


Figure 8: Turkey and G19

Table 12: GCIOR for G19 countries and Turkey during 2009 - 2018

Country	Mean	Std. Dev.	Freq.	Δ(Turkey-G19)
Turkey	53.5	7.56	10	
Argentina	94.9	8.74	10	-41.4**
Australia	19.6	2.46	10	33.9***
Brazil	62.8	11.75	10	-9.3
Canada	12.6	2.22	10	40.9***
China	28.1	1.2	10	25.4***
France	19.7	3.13	10	33.8***
Germany	5.4	1.07	10	48.1***
India	53	9.52	10	0.5
Indonesia	43.5	7.58	10	10
Italy	45.8	3.01	10	7.7
Japan	8	1.49	10	45.5***
Korea Rep.	22.6	4.38	10	30.9***
Mexico	57.2	4.8	10	-3.7
Russian Federation	55.3	10.68	10	-1.8
Saudi Arabia	23.9	4.68	10	29.6***
South Africa	51.2	5.07	10	2.3
United Kingdom	9.9	1.97	10	43.6***
United States	3.5	1.78	10	50***

Source: Author; *p<.05; **p<.01; ***p<.001 by ANOVA Scheffe multiple-comparison test

4.0 Discussion and Concluding Remarks

Since the day Mustafa Kemal created the Turkish Republic, Turkey has faced a constant inventory of instability-inflicting developments; military coup d'état in 1960 and 1980; military memorandum in 1971, 1997, and 2007 (i.e. the Turkish military put pressure on the ruling party instead of sending its tanks); alleged military coup in 1993 and the latest coup d'état attempt in July 2016 by a fraction of the Turkish military. When there were no coup d'état or military memorandums, there were cases associated with coup such as Sarıkız (Blonde Girl), Ayışığı (Moonlight), Yakamoz (Phosphorescence) and Eldiven (Glove), Ergenekon trials (2008-16), and Operation Sledgehammer (a coup plan targeting the AKP – the ruling party that was founded in 2002). All of these episodes of instability not only had severe negative impact on the Turkish economy, but cost taxpayers billions of dollars.⁴¹

The period of 2002-07 (Table 13) was the best time for Turkey in terms of economic growth (over 7%) and annual GDP per capita growth (over 21%), attributable to (i) single party (non-coalition) AKP government; (ii) EU-accession negotiations (Table 12); and (iii) AKP's fruitful economic stimulus programs. Despite Turkey's large market size, weaknesses in quality of infrastructure and human resources base, and inefficient labor market have adversely affected Turkey's growth potential.

⁴¹ Since the early 1980s, the Turkish military has been fighting against the designated terrorist Kurdish militant and political organization called the Kurdistan Workers' Party (PKK), which was founded in 1974 by Abdullah Öcalan; since 1984, more than 40,000 people have been killed and over \$100 billion were spent.

Table 13: Key dates and developments as Turkey's EU bid in limbo

Key Dates	Key Developments
September 1959	Turkey applies for associate membership of the European Economic Community (EEC).
September 1963	Signature of the Association Agreement, aiming at enhancing economic cooperation and achieving a Customs Union between Turkey and the EEC.
April 1987	Turkey presents its formal application for membership of the European Economic Community.
January 1995	EU-Turkey Agreement creating a customs union.
December 1999	The European Council recognizes Turkey as a candidate country.
December 2004	The European Council agrees to start accession negotiations with Turkey.
October 2005	Start of accession negotiations.
December 2006	The Council decides that eight negotiating chapters cannot be opened and no chapter can be closed until Turkey meets its obligation of full, non-discriminatory implementation of the additional protocol to the Association Agreement.
May 2012	European Commission and Turkey start the implementation of the Positive agenda for Turkey.
December 2013	The EU-Turkey readmission agreement is signed in parallel with the launching of the visa liberalization dialogue.
October 2014	The EU-Turkey readmission agreement enters into force.
March 2015	The European Commission and Turkey launch a high-level energy dialogue.
May 2015	The European Commission and Turkey agree to modernize the 20-year-old Customs Union Agreement and to enhance EU-Turkey bilateral trade relations.
November 2015	On the occasion of the EU-Turkey Leaders' Meeting, both sides agree on the activation of a Joint Action Plan aiming at ending the irregular migration from Turkey to the EU, in full compliance with EU and international standards.
December 2015	Chapter 17 on economic and monetary policy is opened.
January 2016	The EU-Turkey high-level political dialogue and high-level energy dialogue take place.
March 2016	The EU and Turkey agree on a Joint Statement on the basis of the Joint Action Plan of November 2015.
April 2016	The first EU-Turkey high-level economic dialogue takes place; the first Report on the implementation of the EU-Turkey Statement of 18 March 2016 is published.
May 2016	The third Report on progress by Turkey in fulfilling the requirements of its visa liberalization roadmap is published.
June 2016	Chapter 33 on financial and budgetary provisions is opened.
September 2016	The EU-Turkey high-level political dialogue takes place.
December 2016	The European Commission adopts a recommendation for opening of negotiations with Turkey or the modernization of the Customs Union.
May 2017	EU-Turkey Leaders' meeting takes place in Brussels.
July 2017	The EU-Turkey high-level political dialogue takes place.
November 2017	The first high-level EU-Turkey dialogue on transport takes place.
December 2017	The EU-Turkey high-level economic dialogue takes place.
March 2018	EU-Turkey Leaders' meeting takes place in Varna, Bulgaria.
April 2018	The 77th EU-Turkey Joint Parliamentary Committee takes place in Brussels.
November 2018	The EU-Turkey high-level political dialogue takes place in Ankara.
December 2018	The 78th EU-Turkey Joint Parliamentary Committee takes place in Ankara.
January 2019	The EU-Turkey high-level dialogue on transport takes place in Brussels.
February 2019	The EU-Turkey high-level economic dialogue takes place in Istanbul.
March 2019	The 54th EU-Turkey Association Council takes place in Brussels.

Source: European Commission; https://www.avrupa.info.tr/en/news/key-findings-2019-report-turkey-9579

Unresolved issues of transparency and inefficiency of public institutions continue to have negative impact on Turkey's sovereign rating and future growth prospects. Geopolitical risks have risen for Turkey since President Recep Tayip Erdoğan walked off the stage at the 2009 Davos summit over clash in Gaza and accused Israel for engaging in inhumane treatment of Palestinians.

Table 14: GDP and GDP per capita annual growth

Date	Annual GDP \$ million	GDP Growth %	Date	GDP Per Capita \$	GDP P.C. Annual Growth %
2007	675,010	5.0	2007	9,563	21.1
2006	550,796	7.1	2006	7,899	8.5
2005	501,163	9.0	2005	7,278	22.3
2004	404,853	9.6	2004	5,953	28.2
2003	311,944	5.6	2003	4,643	29.4
2002	238,342	6.4	2002	3,589	17.6

Source: Countryeconomy.com; https://countryeconomy.com/gdp/turkey

As shown in Table 15, Turkey has dropped by 10 places in the overall rankings, making it far below its historical highs (the country ranked 43rd in 2012-13). Since the 2016 failed coup attempt, there has been a substantial rise in public's distrust for government institutions which became increasingly authoritarian through dysfunctional politics and laws that have been purposely designed to suppress the citizens of Turkey. Furthermore, there has been a noticeable deterioration in democratic progress, attributable to negative developments in rule of law, human rights, and the Judiciary/legal system.

Table 15: Global Competitiveness Index overall rank

Turkey &	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
G8	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
		_							. –	
Canada	10	9	10	12	14	14	15	13	15	14
France	16	16	15	18	21	23	23	22	21	22
Germany	7	7	5	6	6	4	5	4	5	5
Italy	49	48	48	43	42	49	49	43	44	43
Japan	9	8	6	9	10	9	6	6	8	9
Russia	51	63	63	66	67	64	53	45	43	38
UK	12	13	12	10	8	10	9	10	7	8
US	1	2	4	5	7	5	3	3	3	2
Turkey	63	61	61	59	43	44	45	51	55	53

Source: World Economic Forum (WEF); https://www.weforum.org/

When Turkey's Global Competitiveness Index overall rank (GCIOR) is compared with those of the G8 countries, it is only better than Russia but significantly worse than the G7 countries' rankings (Table 14). As far as individual rankings for 12 pillars are concerned, Turkey has achieved 13th place out of 140 countries for *market size* which was its highest ranking, ranked 47th in *innovation capability*, 48th in *health*, and 50th in *infrastructure*; ranked 116th in *macro-economic stability*, it's worst (Figure 9).



Figure 9: Turkey's global competitiveness rankings in 12 pillars

Economic and democratic progress and related developments are interlinked; therefore, advanced nations have made more progress in democracy than poor, developing, and emerging economies. We have made the following conclusions regarding Turkey's backslide on competitiveness which directly or indirectly have contributed to Turkey's backslide on democracy and its EU accession negotiations (Table 13).

Table 16: Areas affecting Turkey's global competitiveness

Year/Rank	Negative Developments Affecting Turkey's Economic and Democratic Progress
2008-09 63rd	Turkey's global competitiveness was hindered by weaknesses in infrastructure, primary education, health care, skilled workforce, and transparency of public institutions. Due to the ruling party's (AKP) increasing dictatorial/authoritarian rule and dysfunctional policies, There has been a significant decrease in public trust for the government. Growing concerns over financial market efficiency and soundness of banks contributed to Turkey's drop by 10 places in the rankings.
2009-10 61st	Turkey's large market has benefited from strong competition and business-friendly practices which were underpinned by macroeconomic stability following the 2008 global financial crisis. However ranked 120th in efficient labor market (in this case, inefficient labor market).
2010-11 61st	The Turkish economy benefited from intense local competition (15th); the infrastructure (roads, ports, and railroads) was improved but still needed major upgrading (ranked 56th). Inefficiencies in the labor market (127th) and transparency of public entities worsened considerably.
2011-12 59th	Again thanks to large market (17th) and strong local competition (13th), Turkey moved up 2 places in the rankings. However, labor market conditions (133rd), transparency of public entities (86th), healthcare (75th), higher education and training continue to affect competitiveness negatively.
2012-13 43rd	Turkey made the biggest leap in the rankings, moved up by 16 places from the previous year, this was largely attributable to Turkey's GDP growth in 2011 (8.4%) and favorable macroeconomic environment. Although there was a noticeable improvement in the transparency of public entities (67th), the labor market inefficiencies (124th) remained to be a bottleneck.
2013-14 44th	Turkey fell by one spot from its highest ranking last year owing to exogenous (macroeconomic instability) and endogenous (rising fiscal deficit and inflation) factors. Excluding the efficiency of the labor market (130th), transparency (58th) and Infrastructure (49th) improved further (49th).
2014-15 45th	Turkey dropped one more place to 45th in the rankings out of 140 countries. After GDP and GDP per capita peaked in 2013 (\$950.3 billion and \$12,395 respectively), the Turkish economy has lost steam since then due to substantially risen geopolitical risks. Also in 2013, Turkey achieved the highest global competitiveness ranking of 43rd (also see Figure 10).
2015-16 51st	Augmented geopolitical risks and the strained US-Turkey relations caused the country to drop six positions to 51st; moreover, a general decline in all 12 pillars was observed. Following the June 2015 elections, political conflict increased. Although the transportation infrastructure (23rd) and goods market efficiency (45th) improved, labor market inefficiency remained very high (127th).
2016-17 55th	Turkey underwent another military coup on July 15, 2016, but this time it ended up as a failed attempt by a fraction of the Turkish military; however, the data was collected before the event. About 4 million refugees from Syria put pressure on the Turkish economy (i.e. the government claims to have spent circa \$50 billion). Week domestic competition, lack of structural reforms, and persistent inefficiencies in the labor market (126th) played a role in the drop of four places.
2017-18 53rd	Turkey moves up two places, but still lower than its historic high ranking of 43rd in 2013. Turkey leads many countries in the adoption of latest technologies, broadband (high-speed internet) subscription has increased from 50% of the population to about 70% (i.e. more than 50 million).

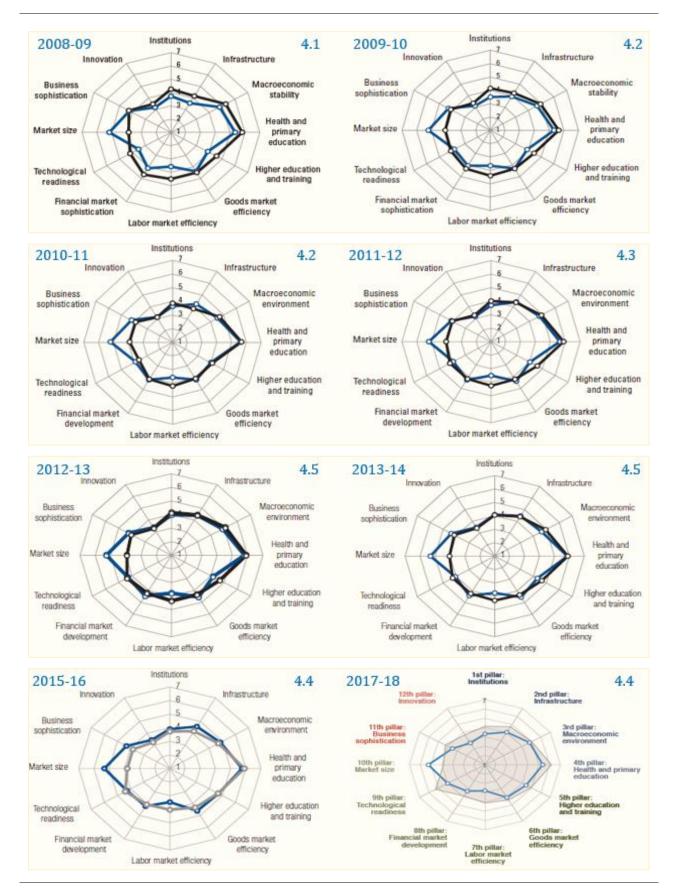


Figure 10: Turkey's global competitiveness overall rankings (2008-2018)

References

- Ahmad, F. (1993). The Making of Modern Turkey. Routledge.
- Akın, R. (2002). Türkiye'de Çok Partili Siyasi Hayat Geçiş Ve Demokrat Parti Yılları (1945-1960), Türkler Ansiklopedisi, 16. Cilt, Yeni Türkiye Yayınları, Ankara, ss. 911-922.
- Aksakal, M. (2008). The Ottoman Road to War in 1914. The Ottoman Empire and the First World War. Cambridge University Press, Cambridge.
- Aksan, V. (2007). Ottoman Wars 1700–1870: An Empire Besieged. London, NY: Pearson Longman.
- Albayrak, M. (2004). Türk Siyasi Tarihinde Demokrat Parti (1946-1960). Phoenix Yayınevi, Ankara.
- Altug, S., Filiztekin, A. & Pamuk, S. (2008). Sources of Long-Term Economic Growth for Turkey, 1880–2005. European Review of Economic History, 12, 393–430. European Historical Economics Society, doi: 10.1017/S1361491608002293 Printed in the United Kingdom.
- Anderson, O. (1964). Great Britain and the Beginnings of the Ottoman Public Debt, 1854-55. The Historical Journal, VII, I, pp. 47-63. Printed in Great Britain.
- Barkey, K. (2008). Empire of Difference: The Ottomans in Comparative Perspective. 357pages.
- Bas, M. A. & Stone, R. W. (2010). If Life Sends You Lemons: Adverse Selection and Growth under IMF Programs. University of Rochester.
- Bird, G., Hussain, M. & Joyce, J. P. (2004). Many Happy Returns? Recidivism and the IMF. Journal of International Money and Finance 23, No. 2, 231-251.
- Birdal, M. (2010). The Political Economy of Ottoman Public Debt. Insolvency and European Financial Control in the Late Nineteenth Century. Tauris Academic Studies, London and New York.
- Blaisdell, D.C. (1929). European Financial Control in the Ottoman Empire. A Study of the Establishment, Activities and Significance of the Administration of the Ottoman Public Debt. Columbia University Press, New York.
- Boratav, K. (2009). Türkiye İktisat Tarihi 1908-2007. Ankara: Imge Kitabevi.
- Caillard, V. (1894). The Ottoman Public Debt, Special Report on the Ottoman Public Debt for the Twelfth Financial Period (13th March, 1893, to 12th March, 1894), followed by the Translation of the Annual Report for the same Year of the Council of Administration, September. London.
- Caillard, V. (1885). The Truth About Turkish Finances. Fortnightly Review September.
- Çakır, C. (2001). Tanzimat Dönemi Osmanlı Maliyesi (Ottoman finance in Tanzimat Era), Küre Yayınları, İstanbul.
- Conte, G. (2014). Regaining Control over Finance: The Ottoman Empire at the Eve of the World War I
- Conway, P. (2007). The Revolving Door: Duration and Recidivism in IMF Programs. Review of Economics and Statistics 89, no. 2 (2007): 205-220.
- Eken, S. & Schadler, S. (2012). Turkey 2000-2010: A Decade of Transition Discussions among Experts. Istanbul, DEİK Publications, November, http://en.deik.org.tr/Contents/FileAction/3130.
- Eldem, E. (2005). Ottoman Financial Integration with Europe: Foreign Loans, the Ottoman Bank and the Ottoman Public Debt. European Review, 13:3, 431-445.
- Eldem, V. (1994). Harp ve Mutakere Yillarinda Osmanli Imparatorlugu'nun Ekonomisi, Ankara: Turk Tarih Kurumu.

- Findley, C.V. (1986). Economic Bases of Revolution and Repression in the Late Ottoman Empire. Comparative Studies in Society and History 28(1): 81–106.
- Findley, C.V. (2004). The Turks in World History. Oxford University Press, October. ISBN 0-19-517726-6.
- Guran, T. (2003). Osmanlı Mali Istatistikleri Bütçeler 1841-1918 (Ottoman Fiscal Statistics in 1841-1918), DĐE Yayınları, Ankara.
- Harris, G. (1965). The Role of the Military in Turkish Politics. Middle East Journal, XIX.
- Hulkiender, H. (2003). Bir Galata Bankeri'nin Portresi: 1806–1884. İstanbul: Osmanlı Bankası Arşiv Araştırma Merkezi.
- Inalcik, H. & Quataert, D. (1995). An Economic and Social History of the Ottoman Empire, 1300-1914. 1995. 1026 pages.
- Ismihan, M., Metin-Ozcan, K. & Tansel A. (2005). The Role of Macroeconomic Instability in Public and Private Capital Accumulation and Growth: The case of Turkey 1963-1999. Applied Economics, 37, 2, pp. 239-251.
- Jackson, P. (2002). Review: The History of the Seljuq Turkmens: The History of the Seljuq Turkmens. Journal of Islamic Studies. Oxford Centre for Islamic Studies. 13(1): 75–76. doi:10.1093/jis/13.1.75.
- Joyce, J.P. (2006). Promises Made, Promises Broken: A Model of IMF Program Implementation. Economics and Politics 18, no. 3 (2006): 339-365.
- Karpat, K. (1959). Turkey's Politics: the Transition to a Multi-Party System. Princeton, NJ.
- Kazgan, H. (1991). Galata Bankerleri. İstanbul: TEB Yayıncılık.
- Kedourie, S. (1989). Turkey Before and After Ataturk: Internal and External Affairs. 282 pages.
- Keynes, J. M. (1936). The General Theory of Employment, Interest, and Money. Macmillan, London.
- Kibritçioğlu, A. (2001). Türkiye'de Ekonomik Krizler ve Hükümetler, 1969-2001. Yeni Türkiye Dergisi, 41, 174-190.
- Kinross, P. (1977). The Ottoman Centuries: The Rise and Fall of the Turkish Empire. ISBN 0-688-03093-9.
- Kıray, E. (1995). Osmanlı'da Ekonomik Yapı ve Dıs Borçlar, (Economic Structure of Ottoman and External Debts). Iletisim Yayınları Đstanbul.
- Kunt, M. & Woodhead, C. (1995). Süleyman the Magnificent and His Age: The Ottoman Empire in the Early Modern World. 218 pages.
- Lipovsky, I. (1991). The legal socialist parties of Turkey, 1960–1980. Middle Eastern Studies. January.
- Mango, A. (2000). Ataturk: The Biography of the Founder of Modern Turkey. ISBN 1-58567-011-1.
- Marois, T. & Güngen, A.R. (2016). Credibility and Class in the Evolution of Public Banks: The Case of Turkey. The Journal of Peasant Studies. 43 (6): 1285–1309, doi:10.1080/03066150.2016.1176023.
- Nas, T.F. (1992). Economics and Politics of Turkish Liberalization. Lehigh University Press. ISBN 978-0-934223-19-5.
- Nas, T.F. (2008). Tracing the Economic Transformation of Turkey from the 1920s to EU Accession. Leiden: Martinus Nijhoff Publishers.

- Önis, Z. (2009). Beyond the 2001 Financial Crisis: The Political Economy of the New Phase of Neo-Liberal Restructuring in Turkey. Review of International Political Economy 16(3) pp. 409-432.
- Özbudun, E. (1976). Social Change and Political Participation in Turkey. Princeton, NJ.
- Pamuk, Ş. (1987). The Ottoman Empire and European Capitalism, 1820-1913. London, New York, Melbourne: Cambridge University Press.
- Raina, L. & Bakker, M.R. (2003). A World Bank Country Study Report: Non-Bank Financial Institutions and Capital Markets in Turkey. World Bank, Washington, D.C. April 2003.
- Rodkey, F.S. (1930). Lord Palmerston and the Rejuvenation of Turkey, 1830-41. Journal of Modern History, II (June 1930), 219.
- Rustow, D. (1957). Politics and Islam in Turkey 1920–1935. In R.N. Frye, (ed.), Islam and the West. The Hague.
- Rustow, D. (1987). Turkey: America's Forgotten Ally, New York, Council on Foreign Relations, 88-89.
- Schick, I. C. & Tonak, A. (1987). Turkey in Transition. New York.
- Schaller, D. J. & Zimmerer, J. (2008). Late Ottoman Genocides: The Dissolution of the Ottoman Empire and Young Turkish Population and Extermination Policies Introduction. Journal of Genocide Research 10 (1): 7–14. doi:10.1080/14623520801950820.
- Shaw, S. J. & Shaw, E. K. (1977). History of the Ottoman Empire and Modern Turkey. Vol. 2, Reform, Revolution, and Republic: The Rise of Modern Turkey, 1808–1975. ISBN 0-521-29163-1.
- Singer, M. (1977). The Economic Advance of Turkey, 1938–1960. Ankara.
- Szyliowicz, J.S. (1966). Political Change in Rural Turkey: Erdemli. The Hague.
- Taskinsoy, J. (2012a). Relevancy of Corporate Financial Policies and the Profit Maximization View of Islamic Banks. Journal of Social and Development Sciences, Vol. 3(6), pp. 184-193, June, ISSN 2221-1152.
- Taskinsoy, J. (2012b). The Investment Rate of Return (IRR) to Tertiary Education in Turkey. Journal of Education and Vocational Research, Vol. 3(5), pp. 154-164, May, ISSN 2221-2590.
- Taskinsoy, J. (2012c). The Return of Investment on Tertiary Education in Malaysia. Journal of Education and Vocational Research, Vol. 3(6), pp. 183-192, ISSN 2221-2590.
- Taskinsoy, J. (2013a). Rigorous Capital Requirements under Basel III: Possible impact on Turkey's financial sector. Journal of WEI Business and Economics, Vol. 2(1), pp. 1-30, April.
- Taskinsoy, J. (2013b). Basel III: Road to Resilient Banking, Impact on Turkey's Financial Sector. LAP LAMBERT Academic Publishing, 237 pages, ISBN 13: 978-3-659-30696-9.
- Taskinsoy, J. (2013c). Economic & Ecological Implications of Hydraulic Fracturing. West East Journal of Social Sciences, Vol. 2(1), pp. 11-39, April.
- Taskinsoy, J. (2018a). Bitcoin Mania: An End to the US Dollar's Hegemony or another Cryptocurrency Experiment Destined to Fail? (December 1, 2018). Available at SSRN: https://ssrn.com/abstract=3311989 or http://dx.doi.org/10.2139/ssrn.3311989.
- Taskinsoy, J. (2018b). Effects of Basel III Higher Capital and Liquidity Requirements on Banking Sectors across the Main South East Asian Nations. International Journal of Scientific & Engineering Research (IJSER), Vol. 9(4), pp. 214-37, April, ISSN 2229-5518.
- Taskinsoy, J. (2018c). The Cost Impact of Basel III across ASEAN-5: Macro Stress Testing of Malaysia's Banking Sector. LAP LAMBERT Academic Publishing, 369 pages, ISBN-13 978-613-9-90012-1.

- Taskinsoy, J. (2018d). A Macro Stress Testing Framework for Assessing Financial Stability: Evidence from Malaysia. Journal of Accounting, Finance and Auditing Studies (JAFAS), Vol. 4(3), July, ISSN 2149-0996
- Taskinsoy, J. (2019a). Ever More Financial Instability notwithstanding the Basel Standards and the IMF's Financial Sector Assessment Program (February 4, 2019). Available at SSRN: https://ssrn.com/abstract=3328473 or http://dx.doi.org/10.2139/ssrn.3328473.
- Taskinsoy, J. (2019b). Turkish Lira A Fiat Currency that Resembles the Volatility of Cryptocurrencies: The Effects of Exchange Rate Volatility on Turkish Economy (February 15, 2019). Available at SSRN: https://ssrn.com/abstract=3335545 or http://dx.doi.org/10.2139/ssrn.3335545.
- Taskinsoy, J. (2019c). The Transition from Barter Trade to Impediments of the Dollar System: One Nation, One Currency, One Monopoly (March 6, 2019). Available at SSRN: https://ssrn.com/abstract=3348119 or http://dx.doi.org/10.2139/ssrn.3348119
- Taskinsoy, J. (2019d). Stress Testing Made Easy: No More US Banks Stumbling and Facing Public Embarrassment Due to the Federal Reserve's Qualitative Objection (March 17, 2019). Available at SSRN: https://ssrn.com/abstract=3354018 or http://dx.doi.org/10.2139/ssrn.3354018.
- Taskinsoy, J. (2019e). Typology of Stress Testing: Microprudential vs. Macroprudential Stress Testing of Risk Exposures (March 28, 2019). Available at SSRN: https://ssrn.com/abstract=3361528 or http://dx.doi.org/10.2139/ssrn.3361528.
- Taskinsoy, J. (2019f). Pure Gold for Economic Freedom: A Supranational Medium of Exchange to End American Monetary Hegemony as the World's Main Reserve Currency (April 25, 2019). Available at SSRN: https://ssrn.com/abstract=3377904 or http://dx.doi.org/10.2139/ssrn.3377904.
- Taskinsoy, J. (2019g). Asian Miracle, Asian Tiger, or Asian Myth? Financial Sector and Risk Assessment through FSAP Experience: Enhancing Bank Supervision in Thailand (May 9, 2019). Available at SSRN: https://ssrn.com/abstract=3385337 or http://dx.doi.org/10.2139/ssrn.3385337.
- Taskinsoy, J. (2019h). Higher Capital and Liquidity Regulations of Basel Standards Have Made Banks and Banking Systems Become More Prone to Financial and Economic Crises (June 9, 2019). Available at SSRN: https://ssrn.com/abstract=3401378 or http://dx.doi.org/10.2139/ssrn.3401378.
- Taskinsoy, J. (2019i). A Delicate Moment in Turkey's Economic Transition: Can Turkey Survive Mounting Economic Problems without the IMF's Bailout Package? (June 22, 2019). Available at SSRN: https://ssrn.com/abstract=3408520 or http://dx.doi.org/10.2139/ssrn.3408520.
- Taskinsoy, J. (2019j). We Need No Dime from the IMF: Is This a Temporary Illusion or Can the Turkish Economy Recover from the Current Recession without the IMF Loans? (July 9, 2019). Available at SSRN: https://ssrn.com/abstract=3417431 or http://dx.doi.org/10.2139/ssrn.3417431.
- Taskinsoy, J. (2019k). Facebook's Project Libra: Will Libra Sputter Out or Spur Central Banks to Introduce Their Own Unique Cryptocurrency Projects? (July 20, 2019). Available at SSRN: https://ssrn.com/abstract=3423453 or http://dx.doi.org/10.2139/ssrn.3423453.
- Taskinsoy, J. (2019l). Is Facebook's Libra Project Already a Miscarriage? (August 15, 2019). Available at SSRN: https://ssrn.com/abstract=3437857 or http://dx.doi.org/10.2139/ssrn.3437857.
- Taskinsoy, J. (2019m). Facebook's Libra: Big Bang or Big Crunch? A Technical Perspective and Challenges for Cryptocurrencies (August 29, 2019). Available at SSRN: https://ssrn.com/abstract=3445150 or http://dx.doi.org/10.2139/ssrn.3445150.

- Taskinsoy, J. (2019n). Turkey's Unravelling Economy Resembles the Ottoman Empire's Financial Collapse (September 29, 2019). Available at SSRN: https://ssrn.com/abstract=3461216 or http://dx.doi.org/10.2139/ssrn.
- Taskinsoy, J. (2019o). A Hiccup in Turkey's Prolonged Credit Fueled Economic Transition: A Comparative Analysis of Before and After the August Rout. Journal of Accounting, Finance and Auditing Studies (JAFAS), Vol. 5(4), October, ISSN 2149-0996. Doi: 10.32602/jafas.2019.37.
- Taskinsoy, J. (2019p). This Time Is Different: Facebook's Libra Can Improve Both Financial Inclusion and Global Financial Stability as a Viable Alternative Currency to the U.S. Dollar. Journal of Accounting, Finance and Auditing Studies (JAFAS), Vol. 5(4), October, ISSN 2149-0996. Doi: 10.32602/jafas.2019.38.
- Taskinsoy, J. (2019q). Blockchain: A Misunderstood Digital Revolution. Things You Need to Know about Blockchain (October 8, 2019). Available at SSRN: https://ssrn.com/abstract=3466480 or http://dx.doi.org/10.2139/ssrn.3466480.
- Taskinsoy, J. (2019r). Blockchain: Moving Beyond Bitcoin into a Digitalized World (October 17, 2019). Available at SSRN: https://ssrn.com/abstract=3471413 or http://dx.doi.org/10.2139/ssrn.3471413.
- Taskinsoy, J. (2019s). Blockchain: An Unorthodox Solution to Reduce Global Warming (October 24, 2019). Available at SSRN: https://ssrn.com/abstract=3475144 or http://dx.doi.org/10.2139/ssrn.3475144.
- Taskinsoy, J. (2019t). Bitcoin and Turkey: A Good Match or a Perfect Storm? (October 30, 2019). Available at SSRN: https://ssrn.com/abstract=3477849 or http://dx.doi.org/10.2139/ssrn.3477849
- Taskinsoy, J. (2019u). Facebook's Libra: Why Does US Government Fear Price Stable Cryptocurrency? (November 7, 2019). Available at SSRN: https://ssrn.com/abstract=3482441 or http://dx.doi.org/10.2139/ssrn.3482441.
- Taskinsoy, J. (2019v). Global Cooling through Blockchain to Avoid Catastrophic Climate Changes by 2050 (November 29, 2019). Available at SSRN: https://ssrn.com/abstract=3495674 or http://dx.doi.org/10.2139/ssrn.3495674.
- Taskinsoy, J. (2019w). The Global Competitiveness Index: A Comparative Analysis between Turkey and G8 Nations (December 8, 2019). Available at SSRN: https://ssrn.com/abstract=3500542 or http://dx.doi.org/10.2139/ssrn.3500542.
- Taskinsoy, J. (2019x). Bitcoin: The Longest Running Mania Tulips of the 21st Century? (December 18, 2019). Available at SSRN: https://ssrn.com/abstract=3505953 or http://dx.doi.org/10.2139/ssrn.3505953.
- Taskinsoy, J. (2019y). Widening Development Gaps between ASEAN-5 and Advanced Nations (December 30, 2019). Available at SSRN: https://ssrn.com/abstract=3511482 or http://dx.doi.org/10.2139/ssrn.3511482.
- Taskinsoy, J. (2020a). Malaysia: 'Crouching Tiger, Hidden Dragon' (January 19, 2020). Available at SSRN: https://ssrn.com/abstract=3522206 or http://dx.doi.org/10.2139/ssrn.3522206.
- Taskinsoy, J. (2020b). No Brainer, Tackle Climate Change by 2030 or Await the Doomsday by 2100 (February 5, 2020). Available at SSRN: https://ssrn.com/abstract=3532709 or http://dx.doi.org/10.2139/ssrn.3532709.

- Taskinsoy, J. (2020c). From Primitive Barter to Inflationary Dollar: A Warless Economic Weapon of Mass Destruction (February 21, 2020). Available at SSRN: https://ssrn.com/abstract=3542145 or http://dx.doi.org/10.2139/ssrn.3542145.
- Taskinsoy, J. (2020d). Stress Testing: A Measure of Financial Stability across ASEAN-5 (February 25, 2020). Available at SSRN: https://ssrn.com/abstract=3543955 or http://dx.doi.org/10.2139/ssrn.3543955.
- Taskinsoy, J. (2020e). Diminishing Dollar Hegemony: What Wars and Sanctions Failed to Accomplish, COVID-19 Has (April 7, 2020). Available at SSRN: https://ssrn.com/abstract=3570910 or http://dx.doi.org/10.2139/ssrn.3570910.
- Taskinsoy, J. (2020f). Old and New Methods of Risk Measurements for Financial Stability amid the Great Outbreak (April 27, 2020). Available at SSRN: https://ssrn.com/abstract=3587150 or http://dx.doi.org/10.2139/ssrn.3587150.
- Taskinsoy, J. (2020g). COVID-19: Is the Great Outbreak a Sign of What the Future Has Stowed for the Human Race? (May 10, 2020). Available at SSRN: https://ssrn.com/abstract=3597434 or http://dx.doi.org/10.2139/ssrn.3597434.
- Taskinsoy, J. (2020h). Cost Implications of the Great Lockdown due to the Novel Coronavirus Outbreak (May 18, 2020). Available at SSRN: https://ssrn.com/abstract=3604573 or http://dx.doi.org/10.2139/ssrn.3604573.
- Taskinsoy, J. (2020i). Coronavirus Pandemic: The U.S. Induced Great Panic of the 21st Century (May 26, 2020). Available at SSRN: https://ssrn.com/abstract=3610749 or http://dx.doi.org/10.2139/ssrn.3610749.
- Taskinsoy, J. (2020j). COVID-19 Could Cause Bigger Cracks in Turkey's Fragile Crisis Prone Economy (May 28, 2020). Available at SSRN: https://ssrn.com/abstract=3613367 or http://dx.doi.org/10.2139/ssrn.3613367.
- Webster, D. (1939). The Turkey of Atatürk: Social Process in the Turkish Reformation. Philadelphia.
- Weiker, W. (1975). Political Tutelage and Democracy in Turkey: the Free Party and Its Aftermath. Leiden.
- Wendt, A. (1992). Anarchy is What States Make of it: Social Construction of Power Politics. International Organization, Vol. 46, No. 2, Spring 1992, pp. 391-425.
- Wimmel, A. (2006). Beyond the Bosphorus? Comparing German, French and British Discourses on Turkey's Application to Join the European Union. Reihe Politikwissenschaft/Political Science Series, No. 111.
- Yeldan, E. (2001). On the IMF-Directed Disinflation Program in Turkey: A Program for Stabilization and Austerity or a Recipe for Impoverishment and Financial Chaos? Ankara: Bilkent University.
- Zurcher, E. J. (2004). Turkey: A Modern History (3rd ed.).

Appendix

All the data contained in the Tables and Figures have been extracted from the Global Competitiveness Index (GCI) reports published annually by the World Economic Forum (WEF).

Table A1: Turkey compared with G8 countries

Country	Year	Brhpe	Brinf	Brins	Brmee	Eefmd	Eegme	Eehet	Eelme	Eemas	Eetrd	Isbus	Isinn
Turkey	2008	78	66	80	79	76	55	72	125	15	58	60	66
Turkey	2009	74	62	96	64	80	56	73	120	15	54	52	69
Turkey	2010	72	56	88	83	61	59	71	127	16	56	52	67
Turkey	2011	75	51	80	69	55	47	74	133	17	55	58	69
Turkey	2012	63	51	64	55	44	38	74	124	15	53	47	55
Turkey	2013	59	49	56	76	51	43	65	130	16	58	43	50
Turkey	2014	69	51	64	58	58	43	50	131	16	55	50	56
Turkey	2015	73	53	75	68	64	45	55	127	16	64	58	60
Turkey	2016	79	48	74	54	82	52	50	126	17	67	65	71
Turkey	2017	84	53	71	50	80	53	48	127	14	62	67	69
Canada	2008	6	6	15	43	10	16	9	7	14	9	18	13
Canada	2009	7	7	17	31	11	16	9	7	14	11	17	12
Canada	2010	6	9	11	36	12	11	8	6	14	16	16	11
Canada	2011	6	11	11	49	13	12	12	5	14	16	24	11
Canada	2012	7	13	11	51	11	13	15	4	13	20	26	22
Canada	2013	7	12	14	50	12	17	16	7	13	21	25	21
Canada	2014	7	15	14	51	8	15	18	7	13	22	23	22
Canada	2015	7	14	16	39	4	15	19	7	14	18	22	24
Canada	2016	9	15	18	41	7	17	19	8	15	21	24	24
Canada	2017	8	16	15	47	7	18	13	7	16	23	23	23
France	2008	9	2	23	65	25	21	16	105	7	20	9	16
France	2009	11	3	26	58	21	25	15	67	8	24	10	18
France	2010	16	4	26	44	16	32	17	60	7	12	12	19
France	2011	16	4	28	83	18	38	20	68	7	13	14	17
France	2012	21	4	32	68	27	46	27	66	8	14	21	17
France	2013	24	4	31	73	33	45	24	71	8	17	21	19
France	2014	18	8	32	82	23	46	28	61	8	18	22	19
France	2015	16	8	29	77	29	35	25	51	8	16	20	18
France	2016	19	7	29	67	31	31	21	51	7	17	14	17
France	2017	24	7	31	63	33	36	22	56	8	21	16	17
Germany	2008	24	1	14	40	19	15	21	58	4	18	1	8
Germany	2009	24	1	16	30	36	18	22	70	5	12	2	7
Germany	2010	25	2 2	13	23	36	21	19	70	5	10	3	8
Germany	2011	23 22		19	30	39	26	7	64	5	14	4	7 7
Germany	2012		3	16	30	32	21	5 3	53	5	15	3	
Germany	2013 2014	21 14	3 7	15 17	27 24	29 25	21 19		41 35	5 5	14 13	3	4 6
Germany	2014	13	7	20	20	18	23	16 17	28	5 5	13	3	6
Germany		13	8	22	20 15	20	23	16	28	5 5	10	3	5
Germany	2016 2017	13	10	21	12	12	23 11	15	14	5	8	5 5	5
Germany	2017	30	54	84	100	91	62	44	126	9	31	21	53
Italy	2008	27	59	97	100	100	65	44	117	9	39	20	50
Italy		26	31	97	76	100	68	49	117	9	43	23	50 50
Italy Italy	2010 2011	20	32	88	92	97	59	47	123	9	43	26	43
Italy	2011	25	28	97	102	111	65	45	123	10	40	28	36
Italy	2012	26	25	102	102	124	87	43	137	10	37	27	38
Italy	2013	22	26	102	101	119	73	47	136	12	38	25	35
Italy	2014	26	26	106	111	119	73	47	126	12	37	24	32
Italy	2015	23	25	108	98	127	67	43	119	12	40	25	32
Italy	2017	25	27	95	96	126	60	43	116	12	41	25	34
Japan	2017	22	11	26	98	42	18	23	110	3	21	3	4
Japan Japan	2008	19	13	28	96 97	61	41	69	75	3 16	88	3 1	4
Japan Japan	2009	9	11	25	105	39	17	20	13	3	28	1	4
_	2010	9	15	25 24	113	39	18	20 19	13	3 4	25	1	
Japan	2011		15	24 22	113 124	32 36	18 20	19 21	12 20	4	25 16	1	4
Japan	2012	10 10	9	22 17	124 127	23	20 16	21	20 23	4	16 19	1	5 5
Japan	2013	6	6	17	127	23 16	16	21	23 22	4	20	1	5 4
Japan	2014	б	б	11	14/	10	12	21	22	4	20	1	4

Japan 2016 5 5 5 16 104 17 16 23 19 4 19 2 8 Japan 2017 7 4 17 93 20 13 23 22 4 15 3 8 Russian Federation 2008 59 59 110 29 112 99 46 27 8 67 91 48 Russian Federation 2009 51 71 114 36 119 108 51 43 7 74 95 51 Russian Federation 2010 53 47 118 79 125 123 50 57 8 69 101 57 8 70 70 70 70 70 8 7 7 7 7 7 7 7 7 7	Japan	2015	4	5	13	121	19	11	21	21	4	19	2	5
Russian Federation 2008 59 59 110 29 112 99 46 27 8 67 91 48 Russian Federation 2009 51 71 114 36 119 108 51 43 7 74 95 51 84 Russian Federation 2010 53 47 118 79 125 123 50 57 8 69 101 57 Russian Federation 2011 68 48 128 44 127 128 52 65 8 68 114 71 Russian Federation 2012 65 47 133 22 130 134 52 84 7 57 119 85 Russian Federation 2014 56 39 97 31 110 99 39 45 7 59 107 78 Russian Federation 2014 56 39 97 31 110 99 39 45 7 59 86 65 Russian Federation 2015 56 35 100 40 95 92 38 50 6 60 80 68 Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2017 54 35 83 53 107 80 32 60 6 57 71 49 United Kingdom 2008 19 18 25 58 51 19 18 8 6 8 12 15 United Kingdom 2010 19 8 17 56 25 22 18 8 8 6 8 12 15 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 12 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 8 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2011 14 8 8 10 12 107 15 13 19 5 6 2 6 12 01 01 01 01 01 01 01 01 01 01 01 01 01	Japan	2016	5	5	16						4			
Russian Federation 2009 51 71 114 36 119 108 51 43 7 74 95 51 Russian Federation 2010 53 47 118 79 125 123 50 57 8 69 101 57 Russian Federation 2011 68 48 128 44 127 128 52 65 8 68 114 71 Russian Federation 2012 65 47 133 22 130 134 52 84 7 57 119 85 Russian Federation 2013 71 45 121 19 121 126 47 72 7 59 107 78 Russian Federation 2014 56 39 97 31 110 99 39 45 7 59 86 65 Russian Federation 2015 56 35 100 40 95 92 38 50 6 60 80 68 Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2017 54 35 83 53 107 80 32 60 6 57 71 49 United Kingdom 2008 19 18 25 58 5 19 18 8 6 8 17 17 United Kingdom 2009 23 20 21 71 24 20 18 8 6 8 17 17 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2012 17 6 13 110 13 17 16 5 6 7 8 10 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2016 17 11 12 68 13 10 20 6 7 4 7 1 1 1 4 1 United Kingdom 2016 17 17 11 12 68 13 10 20 6 7 4 7 1 1 1 4 1 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 1 1 1 4 1 United Kitates 2009 36 8 34 93 20 12 7 3 3 1 13 5 1 United Kitates 2011 42 16 39 90 22 24 13 4 1 10 16 4 5 United Kitates 2014 49 12 30 113 9 16 7 4 1 16 4 5 United Kitates 2014 49 12 30 113 9 16 7 4 4 1 16 4 5 United Kitates 2016 39 11 27 71 3 14 8 4 2 14 4 4 4 United State		2017	-	4	17	93	20		23		4	15	3	_
Russian Federation 2010 53 47 118 79 125 123 50 57 8 69 101 57				59	110	29					8			
Russian Federation 2011 68 48 128 44 127 128 52 65 8 68 114 71														
Russian Federation 2012 65 47 133 22 130 134 52 84 7 57 119 85 Russian Federation 2013 71 45 121 19 121 126 47 72 7 59 107 78 Russian Federation 2014 56 39 97 31 110 99 39 45 7 59 86 65 Russian Federation 2016 62 35 100 40 95 92 38 50 6 60 80 68 Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2017 54 35 83 53 107 80 32 60 6 65 72 71 49 United Kingdom 2010 19 8 17											8			
Russian Federation 2013 71 45 121 19 121 126 47 72 7 59 107 78 Russian Federation 2014 56 39 97 31 110 99 39 45 7 59 86 65 Russian Federation 2015 56 35 100 40 95 92 38 50 6 60 80 68 Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2017 54 35 83 53 107 80 32 60 6 57 71 49 United Kingdom 2009 23 20 21 71 24 20 18 8 6 8 12 15 United Kingdom 2011 14 6 15 85		2011		48							8			
Russian Federation 2014 56 39 97 31 110 99 39 45 7 59 86 65 Russian Federation 2015 56 35 100 40 95 92 38 50 6 60 80 68 Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2016 62 35 83 53 107 80 32 49 6 62 72 56 United Kingdom 2008 19 18 25 58 5 19 18 8 6 8 17 17 United Kingdom 2010 19 8 17 56 25 22 18 8 6 8 12 15 United Kingdom 2011 14 6 15 85 20 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>														
Russian Federation 2015 56 35 100 40 95 92 38 50 6 60 80 68 Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2017 54 35 83 53 107 80 32 60 6 57 71 49 United Kingdom 2008 19 18 25 58 5 19 18 8 6 8 17 71 49 United Kingdom 2010 19 8 17 56 25 22 18 8 6 8 12 15 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2012 17 6 13 110														
Russian Federation 2016 62 35 88 91 108 87 32 49 6 62 72 56 Russian Federation 2017 54 35 83 53 107 80 32 60 6 57 71 49 United Kingdom 2008 19 18 25 58 5 19 18 8 6 8 17 17 United Kingdom 2009 23 20 21 71 24 20 18 8 6 8 12 15 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2012 17 6 13 110 13 17 16 5 6 7 8 10 United Kingdom 2013 16 8 12 115 14 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td></th<>											7			
Russian Federation 2017 54 35 83 53 107 80 32 60 6 57 71 49 United Kingdom 2008 19 18 25 58 5 19 18 8 6 8 17 17 United Kingdom 2009 23 20 21 71 24 20 18 8 6 8 12 15 United Kingdom 2010 19 8 17 56 25 22 18 8 6 8 9 14 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2013 16 8 12 115 15 14		2015			100	40					6			
United Kingdom 2008 19 18 25 58 5 19 18 8 6 8 17 17 17 United Kingdom 2009 23 20 21 71 24 20 18 8 6 8 12 15 United Kingdom 2010 19 8 17 56 25 22 18 8 6 6 8 9 14 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2012 17 6 13 110 13 17 16 5 6 7 8 10 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 1 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 15 6 7 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 2 17 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4											6			
United Kingdom 2019 23 20 21 71 24 20 18 8 6 8 12 15 United Kingdom 2010 19 8 17 56 25 22 18 8 6 8 9 14 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2012 17 6 13 110 13 17 16 5 6 6 7 8 10 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 6 12 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 11 4 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 17 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2013 34 15 35 117 10 20 7 7 4 1 15 6 7 United States 2013 34 15 35 117 10 20 7 7 4 1 15 6 7 United States 2013 34 15 35 117 10 20 7 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 15 6 7 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4											6			
United Kingdom 2010 19 8 17 56 25 22 18 8 6 8 9 14 United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 8 13 United Kingdom 2012 17 6 13 110 13 17 16 5 6 7 8 10 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 11 4 1 10 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 1 10 6 United States 2012 34 14 41 11 16 23 8 6 7 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 17 4 4 4 United States 2015 46 11 28 96 5 16 6 6 4 2 17 4 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4											6			
United Kingdom 2011 14 6 15 85 20 19 16 7 6 8 8 13 United Kingdom 2012 17 6 13 110 13 17 16 5 6 7 8 10 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 11 4 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 17 8 1 United States 2012 34 14 41 111 16 23 8 6 1 10 20 7 4 1 15 6 7 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4											6			
United Kingdom 2012 17 6 13 110 13 17 16 5 6 7 8 10 United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 17 8 1 United States 2012 34 14 41 111 16 23 8 6 1 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4											6			
United Kingdom 2013 16 8 12 115 15 14 17 5 6 4 9 12 United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 17 8 1 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4	U			-						-	6		-	
United Kingdom 2014 21 10 12 107 15 13 19 5 6 2 6 12 United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td>•</td> <td>-</td> <td></td>				-							6	•	-	
United Kingdom 2015 18 9 14 108 16 12 18 5 9 3 6 12 United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 1 20 10 5 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4	U			-							6		-	
United Kingdom 2016 17 9 14 85 16 9 20 5 9 3 7 13 United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 20 10 5 United States 2012 34 14 41 111 16 23 8	Ü													
United Kingdom 2017 17 11 12 68 13 10 20 6 7 4 7 12 United States 2008 34 7 29 66 9 8 5 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 20 10 5 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 <td>U</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>	U			-									-	
United States 2008 34 7 29 66 9 8 5 1 1 11 4 1 United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 20 10 5 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46				-				-			-		•	
United States 2009 36 8 34 93 20 12 7 3 1 13 5 1 United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 120 10 5 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4											-		7	12
United States 2010 42 15 40 87 31 26 9 4 1 17 8 1 United States 2011 42 16 39 90 22 24 13 4 1 20 10 5 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4														1
United States 2011 42 16 39 90 22 24 13 4 1 20 10 5 United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4				_							_		_	
United States 2012 34 14 41 111 16 23 8 6 1 11 10 6 United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4	United States	2010	42	15	40	87	31	26	9	4	1	17	8	1
United States 2013 34 15 35 117 10 20 7 4 1 15 6 7 United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4	United States	2011	42	16	39	90	22	24	13	4	1	20	10	5
United States 2014 49 12 30 113 9 16 7 4 1 16 4 5 United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4			34							6	1		10	
United States 2015 46 11 28 96 5 16 6 4 2 17 4 4 United States 2016 39 11 27 71 3 14 8 4 2 14 4 4		2013					10	20		4	1		6	
United States 2016 39 11 27 71 3 14 8 4 2 14 4 4		2014	49		30		9	16	7	4	_		4	5
		2015	46	11	28			16	6	4	2	17	4	4
United States 2017 29 9 20 83 2 7 3 3 2 6 2 2												14		
	United States	2017	29	9	20	83	2	7	3	3	2	6	2	2

Table A2: Turkey compared with ASEAN-5 countries

Country	Year	Brhpe	Brinf	Brins	Brmee	Eefmd	Eegme	Eehet	Eelme	Eemas	Eetrd	Isbus	Isinn
Turkey	2008	78	66	80	79	76	55	72	125	15	58	60	66
Turkey	2009	74	62	96	64	80	56	73	120	15	54	52	69
Turkey	2010	72	56	88	83	61	59	71	127	16	56	52	67
Turkey	2011	75	51	80	69	55	47	74	133	17	55	58	69
Turkey	2012	63	51	64	55	44	38	74	124	15	53	47	55
Turkey	2013	59	49	56	76	51	43	65	130	16	58	43	50
Turkey	2014	69	51	64	58	58	43	50	131	16	55	50	56
Turkey	2015	73	53	75	68	64	45	55	127	16	64	58	60
Turkey	2016	79	48	74	54	82	52	50	126	17	67	65	71
Turkey	2017	84	53	71	50	80	53	48	127	14	62	67	69
Indonesia	2008	87	86	68	72	57	37	71	43	17	88	39	47
Indonesia	2009	82	84	58	52	61	41	69	75	16	88	40	39
Indonesia	2010	62	82	61	35	62	49	66	84	15	91	37	36
Indonesia	2011	64	76	71	23	69	67	69	94	15	94	45	36
Indonesia	2012	70	78	72	25	70	63	73	120	16	85	42	39
Indonesia	2013	72	61	67	26	60	50	64	103	15	75	37	33
Indonesia	2014	74	56	53	34	42	48	61	110	15	77	34	31
Indonesia	2015	80	62	55	33	49	55	65	115	10	85	36	30
Indonesia	2016	100	60	56	30	42	58	63	108	10	91	39	31
Indonesia	2017	94	52	47	26	37	43	64	96	9	80	32	31
Malaysia	2008	23	23	30	38	16	23	35	18	28	34	22	22
Malaysia	2009	34	26	43	42	6	30	41	31	28	37	24	24
Malaysia	2010	34	30	42	41	7	27	49	35	29	40	25	24
Malaysia	2011	33	26	30	29	3	15	38	20	29	44	20	24
Malaysia	2012	33	32	29	35	6	11	39	24	28	51	20	25
Malaysia	2013	33	29	29	38	6	10	46	25	26	51	20	25
Malaysia	2014	33	25	20	44	4	7	46	19	26	60	15	21
Malaysia	2015	24	24	23	35	9	6	36	19	26	47	13	20

Malaysia	2016	44	24	26	35	13	12	41	24	24	43	20	22
Malaysia	2017	30	22	27	34	16	20	45	26	24	46	20	22
Philippines	2008	90	92	105	53	78	81	60	101	34	70	57	76
Philippines	2009	93	98	113	76	93	95	68	113	35	84	65	99
Philippines	2010	90	104	125	68	75	97	73	111	37	95	60	111
Philippines	2011	92	105	117	54	71	88	71	113	36	83	57	108
Philippines	2012	98	98	94	36	58	86	64	103	35	79	49	94
Philippines	2013	96	96	79	40	48	82	67	100	33	77	49	69
Philippines	2014	92	91	67	26	49	70	64	91	35	69	46	52
Philippines	2015	86	90	77	24	48	80	63	82	30	68	42	48
Philippines	2016	81	95	91	20	48	99	58	86	31	83	52	62
Philippines	2017	82	97	94	22	52	103	55	84	27	83	58	65
Singapore	2008	16	4	1	21	2	1	8	2	41	7	14	11
Singapore	2009	13	4	1	35	2	1	5	1	39	6	14	8
Singapore	2010	3	5	1	33	2	1	5	1	41	11	15	19
Singapore	2011	3	3	1	9	1	1	4	2	37	10	15	8
Singapore	2012	3	2	1	17	2	1	2	2	37	5	14	8
Singapore	2013	2	2	3	18	2	1	2	1	34	7	17	9
Singapore	2014	3	2	3	15	2	1	2	2	31	7	19	9
Singapore	2015	2	2	2	12	2	1	1	2	35	5	18	9
Singapore	2016	2	2	2	11	2	1	1	2	37	9	19	9
Singapore	2017	3	2	2	18	3	1	1	2	35	14	18	9
Thailand	2008	58	29	57	41	49	46	51	13	21	66	46	54
Thailand	2009	61	40	60	22	49	44	54	25	21	63	43	57
Thailand	2010	80	35	64	46	51	41	59	24	23	68	48	52
Thailand	2011	83	42	67	28	50	42	62	30	22	84	47	54
Thailand	2012	78	46	77	27	43	37	60	76	22	84	46	68
Thailand	2013	81	47	78	31	32	34	66	62	22	78	40	66
Thailand	2014	66	48	84	19	34	30	59	66	22	65	41	67
Thailand	2015	67	44	82	27	39	30	56	67	18	58	35	57
Thailand	2016	86	49	84	13	39	37	62	71	18	63	43	54
Thailand	2017	90	43	78	9	40	33	57	65	18	61	42	50

Table A3: Turkey compared with G19 countries

Country	Year	Brhpe	Brinf	Brins	Brmee	Eefmd	Eegme	Eehet	Eelme	Eemas	Eetrd	Isbus	Isinn
Turkey	2008	78	66	80	79	76	55	72	125	15	58	60	66
Turkey	2009	74	62	96	64	80	56	73	120	15	54	52	69
Turkey	2010	72	56	88	83	61	59	71	127	16	56	52	67
Turkey	2011	75	51	80	69	55	47	74	133	17	55	58	69
Turkey	2012	63	51	64	55	44	38	74	124	15	53	47	55
Turkey	2013	59	49	56	76	51	43	65	130	16	58	43	50
Turkey	2014	69	51	64	58	58	43	50	131	16	55	50	56
Turkey	2015	73	53	75	68	64	45	55	127	16	64	58	60
Turkey	2016	79	48	74	54	82	52	50	126	17	67	65	71
Turkey	2017	84	53	71	50	80	53	48	127	14	62	67	69
Canada	2008	6	6	15	43	10	16	9	7	14	9	18	13
Canada	2009	7	7	17	31	11	16	9	7	14	11	17	12
Canada	2010	6	9	11	36	12	11	8	6	14	16	16	11
Canada	2011	6	11	11	49	13	12	12	5	14	16	24	11
Canada	2012	7	13	11	51	11	13	15	4	13	20	26	22
Canada	2013	7	12	14	50	12	17	16	7	13	21	25	21
Canada	2014	7	15	14	51	8	15	18	7	13	22	23	22
Canada	2015	7	14	16	39	4	15	19	7	14	18	22	24
Canada	2016	9	15	18	41	7	17	19	8	15	21	24	24
Canada	2017	8	16	15	47	7	18	13	7	16	23	23	23
France	2008	9	2	23	65	25	21	16	105	7	20	9	16
France	2009	11	3	26	58	21	25	15	67	8	24	10	18
France	2010	16	4	26	44	16	32	17	60	7	12	12	19
France	2011	16	4	28	83	18	38	20	68	7	13	14	17
France	2012	21	4	32	68	27	46	27	66	8	14	21	17
France	2013	24	4	31	73	33	45	24	71	8	17	21	19
France	2014	18	8	32	82	23	46	28	61	8	18	22	19
France	2015	16	8	29	77	29	35	25	51	8	16	20	18
France	2016	19	7	29	67	31	31	21	51	7	17	14	17

France	2017	24	7	31	63	33	36	22	56	8	21	16	17
Germany	2008	24	1	14	40	19	15	21	58	4	18	1	8
•													
Germany	2009	24	1	16	30	36	18	22	70	5	12	2	7
Germany	2010	25	2	13	23	36	21	19	70	5	10	3	8
Germany	2011	23	2	19	30	39	26	7	64	5	14	4	7
Germany	2012	22	3	16	30	32	21	5	53	5	15	3	7
•													
Germany	2013	21	3	15	27	29	21	3	41	5	14	3	4
Germany	2014	14	7	17	24	25	19	16	35	5	13	3	6
Germany	2015	13	7	20	20	18	23	17	28	5	12	3	6
Germany	2016	14	8	22	15	20	23	16	22	5	10	3	5
•													
Germany	2017	13	10	21	12	12	11	15	14	5	8	5	5
Italy	2008	30	54	84	100	91	62	44	126	9	31	21	53
Italy	2009	27	59	97	102	100	65	49	117	9	39	20	50
Italy	2010	26	31	92	76	101	68	47	118	9	43	23	50
•										-			
Italy	2011	20	32	88	92	97	59	41	123	9	42	26	43
Italy	2012	25	28	97	102	111	65	45	127	10	40	28	36
Italy	2013	26	25	102	101	124	87	42	137	10	37	27	38
Italy	2014	22	26	106	108	119	73	47	136	12	38	25	35
•													
Italy	2015	26	26	106	111	117	71	45	126	12	37	24	32
Italy	2016	23	25	103	98	127	67	43	119	12	40	25	32
Italy	2017	25	27	95	96	126	60	41	116	12	41	25	34
Japan	2008	22	11	26	98	42	18	23	11	3	21	3	4
	2009	19	13	28	97	61	41	69	75	16	88	1	4
Japan													
Japan	2010	9	11	25	105	39	17	20	13	3	28	1	4
Japan	2011	9	15	24	113	32	18	19	12	4	25	1	4
Japan	2012	10	11	22	124	36	20	21	20	4	16	1	5
Japan	2013	10	9	17	127	23	16	21	23	4	19	1	5
· •	2014	6	6	11	127	16	12	21	22	4	20	1	4
Japan													
Japan	2015	4	5	13	121	19	11	21	21	4	19	2	5
Japan	2016	5	5	16	104	17	16	23	19	4	19	2	8
Japan	2017	7	4	17	93	20	13	23	22	4	15	3	8
Russian Federation	2008	59	59	110	29	112	99	46	27	8	67	91	48
Russian Federation	2009	51	71	114	36	119	108	51	43	7	74	95	51
Russian Federation	2010	53	47	118	79	125	123	50	57	8	69	101	57
Russian Federation	2011	68	48	128	44	127	128	52	65	8	68	114	71
Russian Federation	2012	65	47	133	22	130	134	52	84	7	57	119	85
								47		7	59		
Russian Federation	2013	71	45	121	19	121	126		72			107	78
Russian Federation	2014	56	39	97	31	110	99	39	45	7	59	86	65
Russian Federation	2015	56	35	100	40	95	92	38	50	6	60	80	68
Russian Federation	2016	62	35	88	91	108	87	32	49	6	62	72	56
Russian Federation	2017	54	35	83	53	107	80	32	60	6	57	71	49
United Kingdom	2008	19	18	25	58	5	19	18	8	6	8	17	17
United Kingdom	2009	23	20	21	71	24	20	18	8	6	8	12	15
United Kingdom	2010	19	8	17	56	25	22	18	8	6	8	9	14
United Kingdom	2011	14	6	15	85	20	19	16	7	6	8	8	13
United Kingdom	2012	17	6	13	110	13	17	16	5	6	7	8	10
U													
United Kingdom	2013	16	8	12	115	15	14	17	5	6	4	9	12
United Kingdom	2014	21	10	12	107	15	13	19	5	6	2	6	12
United Kingdom	2015	18	9	14	108	16	12	18	5	9	3	6	12
United Kingdom	2016	17	9	14	85	16	9	20	5	9	3	7	13
United Kingdom	2017	17	11	12	68	13	10	20	6	7	4	7	12
U													
United States	2008	34	7	29	66	9	8	5	1	1	11	4	1
United States	2009	36	8	34	93	20	12	7	3	1	13	5	1
United States	2010	42	15	40	87	31	26	9	4	1	17	8	1
United States	2011	42	16	39	90	22	24	13	4	1	20	10	5
United States													
	2012	34	14	41	111	16	23	8	6	1	11	10	6
United States	2013	34	15	35	117	10	20	7	4	1	15	6	7
United States	2014	49	12	30	113	9	16	7	4	1	16	4	5
United States	2015	46	11	28	96	5	16	6	4	2	17	4	4
United States	2016	39	11	27	71	3	14	8	4	2	14	4	4
			9						3				
United States	2017	29		20	83	2	7	3		2	6	2	2
Argentina	2008	61	87	128	64	117	122	56	130	24	76	71	98
Argentina	2009	59	88	126	48	116	124	55	123	23	68	73	86
Argentina	2010	60	77	132	54	126	135	55	128	24	73	75	73
Argentina	2011	56	81	134	62	126	137	54	131	24	64	79	78
Argentina	2012	59	86	138	94	131	140	53	140	23	67	89	91
Argentina	2013	61	89	143	111	133	145	49	144	24	88	95	104
Argentina	2014	67	89	137	102	129	141	45	143	24	82	96	97
Argentina	2015	68	87	135	114	132	138	39	139	27	69	101	93
O													

	2016	60	05	400	400	405	405	40	120	20	60	00	04
Argentina	2016	63	85	130	130	127	135	40	130	28	69	88	81
Argentina	2017	64	81	113	125	121	133	38	132	32	66	78	72
Australia	2008	15	21	12	28	6	10	14	9	19	19	26	20
Australia	2009	16	25	12	18	4	9	14	9	19	20	26	20
Australia	2010	13	22	14	17	3	18	14	11	18	23	29	21
Australia	2011	10	24	13	26	6	22	11	13	19	22	29	22
Australia	2012	13	18	18	26	8	24	11	42	21	19	30	23
Australia	2013	22	18	23	25	7	31	15	54	18	12	30	22
Australia	2014	17	20	19	30	6	29	11	56	18	19	28	25
Australia	2015	9	16	19	28	7	27	8	36	22	21	27	23
Australia	2016	10	17	19	23	6	27	9	28	22	24	28	26
Australia	2017	12	28	18	27	6	28	9	28	22	27	28	27
Brazil	2008	79	78	91	122	64	101	58	91	10	56	35	43
Brazil	2009	79 79	74	93	109	51	99	58	80	10	46	32	43
Brazil	2010	87	62	93	111	50	114	58	96	10	54	31	42
		87	64	77		43	113	57	83		54	31	
Brazil	2011				115					10		33	44
Brazil	2012	88	70	79	62	46	104	66	69	9	48		49
Brazil	2013	89	71	80	75	50	123	72	92	9	55	39	55
Brazil	2014	77	76	94	85	53	123	41	109	9	58	47	62
Brazil	2015	103	74	121	117	58	128	93	122	7	54	56	84
Brazil	2016	99	72	120	126	93	128	84	117	8	59	63	100
Brazil	2017	96	73	109	124	92	122	79	114	10	55	56	85
China	2008	50	47	56	11	109	51	64	51	2	77	43	28
China	2009	45	46	48	8	81	42	61	32	2	79	38	26
China	2010	37	50	49	4	57	43	60	38	2	78	41	26
China	2011	32	44	48	10	48	45	58	36	2	77	37	29
China	2012	35	48	50	11	54	59	62	41	2	88	45	33
China	2013	40	48	47	10	54	61	70	34	2	85	45	32
China	2014	46	46	47	10	54	56	65	37	2	83	43	32
China	2015	44	39	51	8	54	58	68	37	1	74	38	31
China	2016	41	42	45	8	56	56	54	39	1	74	34	30
China	2017	40	46	41	17	48	46	47	38	1	73	33	28
India	2008	100	72	53	109	34	47	63	89	5	69	27	32
India	2009	101	76	54	96	16	48	66	83	4	83	27	30
India	2010	101	86	58	73	17	71	85	92	4	86	44	39
India	2010	104	89	69	105	21	70	87	81	3	93	43	38
India	2011	101	84	70	99	21	75	86	82	3	96	40	36 41
				70 72			75 85		99	3	98		
India	2013	102	85		110	19		91				42	41
India	2014	98	87	70	101	51	95	93	112	3	121	57	49
India	2015	84	81	60	91	53	91	90	103	3	120	52	42
India	2016	85	68	42	75	38	60	81	84	3	110	35	29
India	2017	91	66	39	80	42	56	75	75	3	107	39	29
Indonesia	2008	87	86	68	72	57	37	71	43	17	88	39	47
Indonesia	2009	82	84	58	52	61	41	69	75	16	88	40	39
Indonesia	2010	62	82	61	35	62	49	66	84	15	91	37	36
Indonesia	2011	64	76	71	23	69	67	69	94	15	94	45	36
Indonesia	2012	70	78	72	25	70	63	73	120	16	85	42	39
Indonesia	2013	72	61	67	26	60	50	64	103	15	75	37	33
Indonesia	2014	74	56	53	34	42	48	61	110	15	77	34	31
Indonesia	2015	80	62	55	33	49	55	65	115	10	85	36	30
Indonesia	2016	100	60	56	30	42	58	63	108	10	91	39	31
Indonesia	2017	94	52	47	26	37	43	64	96	9	80	32	31
Korea Rep.	2008	26	15	28	4	37	22	12	41	13	13	16	9
Korea Rep.	2009	27	17	53	11	58	36	16	84	12	15	21	11
Korea Rep.	2010	21	18	62	6	83	38	15	78	11	19	24	12
Korea Rep.	2011	15	9	65	6	80	37	17	76	11	18	25	14
Korea Rep.	2012	11	9	62	10	71	29	17	73	11	18	22	16
Korea Rep.	2013	18	11	74	9	81	33	19	78	12	22	24	17
Korea Rep.	2014	27	14	82	7	80	33	23	86	11	25	27	17
Korea Rep.	2015	23	13	69	5	87	26	23	83	13	27	26	19
Korea Rep.	2015	29	10	63	3	80	24	25	77	13	28	23	20
Korea Rep.	2010	28	8	58	2	74	24	25	73	13	29	26	18
•				58 97	48		73	25 74				58	90
Mexico	2008	65 65	68 69	97 98	48 28	66 73	73 90	74 74	110	11	71 71	58 62	90 78
Mexico	2009								115	11			
Mexico	2010	70	75	106	28	96	96	79 72	120	12	71	67	78
Mexico	2011	69	66	103	39	83	84	72	114	12	63	56	63
Mexico	2012	68	68	92	40	61	79	77	102	12	72	44	56
Mexico	2013	73	64	96	49	59	83	85	113	11	74	55	61
Mexico	2014	71	65	102	53	63	86	87	121	10	79	58	61

Mexico	2015	71	59	109	56	46	82	86	114	11	73	50	59
Mexico	2016	74	57	116	51	35	70	82	105	11	73	45	55
Mexico	2017	76	62	123	43	36	70	80	105	11	71	49	56
Saudi Arabia	2008	51	41	34	9	73	34	53	63	22	51	41	34
Saudi Arabia	2009	71	36	32	9	53	29	53	71	22	44	35	32
Saudi Arabia	2010	74	28	21	22	22	10	51	66	22	42	19	28
Saudi Arabia	2011	61	25	12	12	16	4	36	50	23	43	17	26
Saudi Arabia	2012	58	26	15	6	22	14	40	59	24	35	25	29
Saudi Arabia	2013	53	31	20	4	27	27	48	70	23	41	28	30
Saudi Arabia	2014	50	30	25	4	30	35	57	64	20	45	30	33
Saudi Arabia	2015	49	30	24	4	41	29	49	60	17	42	29	34
Saudi Arabia	2016	51	31	24	68	47	41	46	65	14	41	31	42
Saudi Arabia	2017	51	29	26	58	56	42	43	80	15	44	34	40
South Africa	2008	122	48	46	63	24	31	57	88	23	49	33	37
South Africa	2009	125	45	45	68	5	35	65	90	24	65	36	41
South Africa	2010	129	63	47	43	9	40	75	97	25	76	38	44
South Africa	2011	131	62	46	55	4	32	73	95	25	76	38	41
South Africa	2012	132	63	43	69	3	32	84	113	25	62	38	42
South Africa	2013	135	66	41	95	3	28	89	116	25	62	35	39
South Africa	2014	132	60	36	89	7	32	86	113	25	66	31	43
South Africa	2015	126	68	38	85	12	38	83	107	29	50	33	38
South Africa	2016	123	64	40	79	11	28	77	97	30	49	30	35
South Africa	2017	121	61	76	82	44	54	85	93	30	54	37	39



Figure A1: Turkey and G8



Figure A2: Turkey and ASEAN-5



Figure A3: Turkey and G19