



**Universidade do Minho**Escola de Economia e Gestão

Edgar Fortes Ferreira Campos

**Equity Research Report: Infosys Limited** 

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## **Universidade do Minho**Escola de Economia e Gestão

Edgar Fortes Ferreira Campos

Relatório de Investigação de Capital Próprio: Infosys Limited

Projeto de Mestrado Mestrado em Finanças

Projeto supervisionado por Professor Doutor Gilberto Loureiro



## **Universidade do Minho** Escola de Economia e Gestão

Edgar Fortes Ferreira Campos

# **Equity Research Report: Infosys Limited**

Master's Project Master in Finance

Project supervised by **Professor Doctor Gilberto Loureiro** 

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#### Resumo

Este Relatório de Investigação de Capital Próprio é o resultado do Projeto final de Mestrado realizado no âmbito do Mestrado em Finanças da Universidade do Minho. Este consiste numa avaliação do Capital Próprio de uma empresa pública, neste caso, sobre a Infosys Limited, uma multinacional Indiana na indústria de Tecnologias de Informação (TI). O resultado deste Relatório é uma recomendação de compra das ações da Infosys, com preço alvo de 1566.1 INR, o que representa um potencial de valorização de 18% relativamente ao preço atual (29 de Maio) de 1315.0 INR. A estrutura do Relatório é baseada nas diretrizes recomendadas pelo CFA Institute.

O primeiro capítulo inclui o sumário do Relatório, lá estão incluídos a recomendação de investimento, e uma breve lista de pontos-chave relativos à empresa e ao contexto do Relatório. Em seguida, é explicado o modelo de negócio da empresa, o processo de criação de valor e uma lista dos serviços que oferecem. Depois, uma análise ao desempenho da empresa, e ao dos seus pares, relativo à sustentabilidade ambiental, responsabilidade social e ética corporativa (ESG). Segue-se o estudo do paradigma atual, e do horizonte futuro tanto na economia - abordado neste relatório como regiões geográficas em que tem forte presença-, como na indústria, anteriormente mencionado, de Tecnologias de Informação. O capítulo seguinte aborda o estudo dos relatórios financeiros passados, bem como a estimação do desempenho futuro. Ainda neste capítulo é feita uma comparação através do uso de rácios financeiros entre a Infosys e as empresas pares. Estas análises culminam na "Avaliação", onde os Fluxos de Caixa Futuros são estimados e, juntamente com métricas de desempenho futuro da empresa, e sobre os mercados financeiros, são utilizados para chegar ao valor intrínseco da empresa e, por conseguinte, ao Capital Próprio. Paralelamente é também feita uma avaliação ao Capital Próprio da empresa utilizando múltiplos calculados com os rácios financeiros. Segue-se uma análise às premissas usadas na estimação do valor do Capital Próprio, feita através do estudo da flutuação percentual de variáveis-chave e do(s) impacto(s) no valor da ação quando as mesmas oscilam. O Relatório termina com a descrição de possíveis riscos que a empresa seja provável de enfrentar, bem como o impacto que poderão ter, e como isso se refletiria no valor do Capital Próprio.

Concluindo, o Relatório de Investigação descreve amplamente o modelo de negócio da Infosys e o contexto económico em que se encontra. Não só é a indústria de Tecnologias de Informação uma das com futuro mais promissor no curto e médio prazo, como também a Índia representa a economia com o maior crescimento esperado futuro. Todos juntos, estes fatores fazem da Infosys uma boa oportunidade de investimento.

**Palavras-Chave:** Análise de Sensibilidade, Análise de Pares, Avaliação de Empresas, Capital Próprio, ESG, Fluxos de Caixa Futuros, Índia, Infosys, Mercados Financeiros, Recomendação de Investimento, Tecnologias de Informação.

#### **Abstract**

This Equity Research Report is the result of the Master's final Project carried out within the scope of the Master in Finance program at the University of Minho. It consists of an evaluation of the Equity of a public company, in this case, on Infosys Limited, an Indian multinational in the Information Technology (IT) industry. The outcome of this Report is a Buy recommendation for Infosys shares, with a target price of 1566.1 INR, which represents an upside potential of 18% relative to the current price (as of May 29) of 1315.0 INR. The Report's structure is based on the guidelines recommended by the CFA Institute.

The first chapter includes the summary of the Report, encompassing the investment recommendation and a brief list of key topics related to the company and the Report's context. Subsequently, the company's business model, value creation process, and a list of services offered are explained. Following this, an analysis of the company's performance and that of its peers is conducted, regarding environmental sustainability, social responsibility, and corporate ethics (ESG). The study then delves into the current economic paradigm and the future horizon, regarding both the economy - addressed in this Report as the geographical regions in which the company has a strong presence, and the IT industry previously mentioned. The subsequent chapter encompasses the examination of past financial reports, as well as the estimation of future performance. An additional comparison using financial ratios between Infosys and its peer companies is carried out within this chapter. These analyses culminate in the "Valuation" section, where Future Cashflows are estimated and, together with metrics regarding the company's future performance and financial markets, are employed to determine the intrinsic value of the company and, consequently, its Equity. Simultaneously, an evaluation of the company's Equity is conducted using multiples calculated with the financial ratios. An assessment of the assumptions used in estimating the Equity value is subsequently presented, achieved through studying the percentage fluctuation of key variables and the impact(s) on the share value when they vary. The Report concludes by describing potential risks the company is likely to face, as well as their potential impact and how that would be reflected in the Equity value.

In summary, the Research Report extensively describes Infosys' business model and the economic context in which it operates. Not only is the Information Technology industry one of the most promising in the short and medium term, but India also represents the economy with the highest expected future growth. Together, all of these factors make Infosys a compelling investment opportunity.

**Keywords:** Corporate Valuation, Equity, ESG, Financial Markets, Future Cashflows, India, Infosys, Information Technology, Investment recommendation, Peer analysis, Sensitivity Analysis

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# Infosys Limited The future is now

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The purpose of this Equity Research Report is to arrive at an investment recommendation for the shares of Infosys Limited, a public Indian company, in the industry of IT Services, listed in both the National Stock Exchange of India (NSE) and Nasdaq, under the ticker symbol INFY. They are also listed on the Bombay Stock Exchange (BSE) under the ticker 500209.

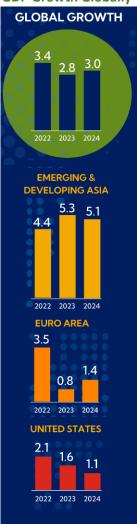
## **Investment Summary**



Recommendation		BUY
Date		29/05/2023
Current Price	₹	1,315.0
Target Price	₹	1,566.1
Upside		18%
52-Week range		1185.3 - 1672.6
Industry		Software & IT Services
Sector		Technology
Ticker		XNSE:INFY
Exchange Market		NSE India
Shares Outstanding		4,137,703,000
	-	
Market Capitalization	₹	5,438,597,000,000
EPS (2022)	₹	52.41
Free Float		86.3%

I issue a BUY recommendation for Infosys Ltd with a target price of INR 1566.1 (for April 2023), presenting a 18% upside potential to the current share price INR 1315.0 on May 29th. My recommendation is based on an analysis on their previous financial results from 2018 to 2022, a Discounted Cashflow (DCF) Model for the period between 2024 and 2028, connected through my estimates for their 2022/2023 financial results. This upside is based on several key factors that will determine the future performance of Infosys as a company, as well as the Indian market as a whole. Some of them include 1) the future of the IT Services industry as digitalization and outsourcing become increasingly attractive for companies; 2) new products in the horizon that may revolutionize the status quo of the industry; and 3) the competitive positioning of India.

Figure 2 – Short Term GDP Growth Globally



Source: IMF

#### **A Rising Industry**

The future of IT appears to be a promising one. As more and more economies around the world adopt new digital solutions for everyday operations of their companies, and companies that provide that outsourcing reach economies of scale and well-defined processes for that. This makes the IT industry one of the fastest growing industries of the decade.

#### New challenges or new solutions?

**Artificial Intelligence:** All has the potential to automate many tasks currently performed by human workers, such as data analysis and software testing. This could reduce the need for some IT services and change the nature of the work that is required.

**Blockchain:** Blockchain technology could potentially eliminate the need for intermediaries in transactions, which could reduce the need for certain IT services related to financial transactions and data security.

**Cloud Computing:** Cloud computing has already disrupted the IT services industry to a certain extent, but it could continue to do so as more companies move their operations to the cloud and reduce the need for onpremises infrastructures.

**Quantum Computing:** Quantum computing has the potential to perform certain calculations much faster than classical computers, which could have implications for certain areas of the IT services industry, such as data analysis and optimization.

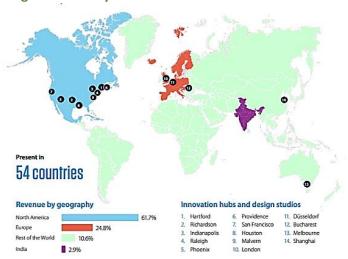
#### India in the Global stage

India shows promising potential (Figure 2) for the future despite the global economic downturn. With strong performance in services exports, driven by digitization and demographic trends, India can leverage its comparative advantages in several industries. To unlock this potential, India needs to strike a balance between stability and growth and attract more investment to further propel its economic prospects. This, in alignment with strong monetary policies may allow India to boost itself to the grand scheme of markets and become one of the major players in international trade and politics.

## **Business Description**

Headquartered in Bangalore, India, Infosys is a leading global provider of information technology and consulting services with a presence in over 54 countries (Figure 3). The company has a diverse workforce of over 314,000 employees, including software developers, engineers, consultants, and business analysts, who are committed to delivering innovative technology solutions to clients across various industries. Infosys has a strong focus on research and development, investing heavily in emerging technologies like artificial intelligence, blockchain, and the Internet of Things (IoT), as well as in its employees' professional development. With a proven track record of delivering reliable, cost-effective solutions, Infosys has become a trusted partner to businesses of all sizes worldwide.

Figure 3 – Infosys Presence Worldwide



Source: Infosys Annual Report 2022

Figure 4 - Client base by size - 2021-2022

Clients	2022	2021
100 million dollar +	38	32
50 million dollar +	64	59
10 million dollar +	275	252
1 million dollar +	853	779

Source: Infosys Annual Report 2022

Their extensive range of services includes managed services, cloud solutions, network infrastructure, cybersecurity, software development, custom application development, digital transformation services, customer relationship management (CRM), enterprise resource planning (ERP), artificial intelligence (AI), machine learning, data analytics, and business process outsourcing as a service (BPaaS), and more.

Their managed services offering is one of their core services and involves providing ongoing IT support and maintenance to businesses. This can include monitoring and managing networks, servers, and other IT systems, as well as providing helpdesk support to employees. Infosys' cloud solutions allow businesses to store and access data and applications remotely while also offering cybersecurity services to protect against threats like malware and hacking.

In addition to their core services, Infosys provides custom software development services to help businesses build custom applications and systems tailored to their specific needs. They have experience working with a wide range of technologies and programming languages, specializing in developing everything from simple mobile apps to complex enterprise software systems. Infosys' CRM and ERP solutions enable businesses to manage their

customer interactions and internal operations more efficiently. Their ERP solutions streamline finance, procurement, and supply chain operations, while their CRM solutions help businesses improve customer satisfaction and increase sales. The multitude of services provided, aligned with the diverse client base (Figure 4) and different industry exposure, makes Infosys' operations hedged, a perfect catalyst for strong growth.

Infosys is also at the forefront of innovation in the industry, offering cutting-edge solutions in AI and machine learning. They provide advanced analytics and data management services that allow businesses to gain insights and make data-driven decisions. With a particular focus on industries like healthcare, education, and manufacturing, Infosys has developed expertise in these sectors.

Overall, Infosys is committed to delivering high-quality technology solutions and services that meet their clients' unique needs. Their focus on providing reliable, cost-effective solutions has earned them a strong reputation in the industry. Additionally, their comprehensive list of services also includes digital transformation services, data analytics, and other emerging technologies that can drive innovation in your business.

## **Environmental, Social & Governance**

As companies increasingly recognize the importance of environmental sustainability, social responsibility, and ethical governance, ESG analysis has become an essential tool for assessing a company's performance in these areas. In recent years, ESG analysis has gained significant attention from investors and stakeholders, as it provides a holistic view of a company's long-term value and risk profile. The last 5 years of ESG score issued by Refinitiv are displayed in Figure 5. Given the nature of the IT industry different weights are attributable to each pillar of the score, where in the case of IT its clearly the governance dimension. Infosys' score has steadily increased over the years, with particular focus on their strong performance on the Social and Governance pillars. Only the Controversies seem to take a tool on their combined score. This will be further explored in the following segments.

Figure 5 - ESG Score Evolution

<u> </u>					
	2018	2019	2020	2021	2022
ESG Combined Score	В	B-	B-	Α	B+
ESG Score (Weight 100.0%)	Α	Α	Α	Α	A+
Environmental Pillar Score (Weight 13.9%)	A-	<b>A</b> -	<b>A</b> -	<b>A</b> -	A-
Social Pillar Score (Weight 39.8%)	A+	A+	A+	A+	A+
Governance Pillar Score (Weight 46.3%)	A+	A+	A+	A+	A+
ESG Controversies Score	C-	D+	D+	A-	B-

Source: Refinitiv Eikon

In Figure 6, the ESG Risk Rating (published by MorningStar in Sustainalytics) for Infosys is compared with its Peers in the Indian IT industry. The exposure metric refers to the extent to which a company is exposed to different material ESG issues, such as business model. The Management metric refers to how well the company manages its relevant ESG issues, this is assessed by their ESG programs, practices, and policies. It's clear that Infosys is well positioned in both metrics, resulting in a good score of 13.1.

Figure 6 - ESG Risk Rating Comparison to Peers

	Infosys Ltd	Tata Consultancy Services Ltd	HCL Technologies Ltd	Wipro Ltd	LTIMindtree Ltd	Tech Mahindra Ltd	Mphasis Ltd	Persistent Systems Ltd	
ESG Risk Rating	13.1 - LOW	11.4 - LOW	12.9 - LOW	13.2 - LOW	22.4 - MEDIUM	11.6 - LOW	22.6 - MEDIUM	19.3 - LOW	
Exposure	LOW	LOW	LOW	LOW	MEDIUM	LOW	LOW	LOW	
Management	STRONG	STRONG	STRONG	STRONG	AVERAGE	STRONG	WEAK	AVERAGE	

Environment

Source: Sustainalytics

## Figure 7 – Environmental Score Evolution

	2018	2019	2020	2021	2022
Environmental Pillar Score	A	A	A	A	A-
Resource Use (Weight 4.6%)	A+	A+	Α <del>ι</del>	A+	A+
Emissions (Weight 3.1%)	A+	A+	A+	A+	A+
Innovation (Weight 6.2%)	B-	B-	B-	B-	B-

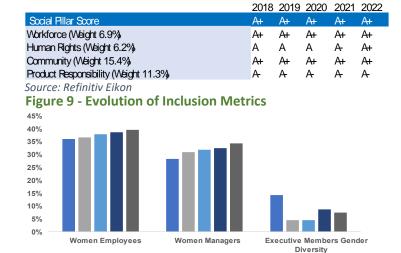
Source: Refinitiv Eikon

Environmental considerations focus on the impact of the company's operations on the natural environment. For Infosys, I should look at how the company manages its carbon footprint, energy consumption, waste management, and other environmental factors. The company has set

ambitious targets for reducing its carbon footprint, including becoming carbon neutral by 2030 and achieving net-zero emissions by 2040. They achieved the 3rd consecutive year of being carbon neutral across scope 1, 2 and 3 emissions. Infosys has also implemented various initiatives such as water conservation, renewable energy usage, and waste reduction programs. Since Infosys is an IT services company, with most of their operations digital, the environmental pillar objectives do not represent any major alteration of their course of business, at most a philanthropist mindset. Nevertheless, they obtain very positive scores (Figure 7) obtaining the maximum grade in all, expect in the Innovation metric.

#### Social

Figure 8 - Social Score Evolution



■2018 ■2019 ■2020 ■2021 ■2022

Source: Own Estimates & Refinitiv Eikon

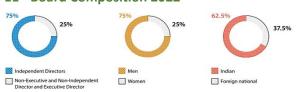
Social considerations focus on the company's impact on society, including its employees, customers, and communities. As such, I evaluated its policies on employee diversity and inclusion, labour practices, and community engagement. The company has a strong commitment to diversity and inclusion, with a focus on gender balance, achieving almost 40% women employee participation, and 25% in the Board of Directors (Figure 8). Infosys has implemented various programs to promote employee well-being and development and has also launched initiatives to support education, healthcare, and environmental sustainability in the communities where it operates. This culminates in a perfect grade in all metrics of the Social pillar, where in the last 5 years, Infosys has maintained a strong performance (Figure 9).

#### Governance

Figure 10 - Governance Score Evolution

	2018	2019	2020	2021	2022
Governance Pillar Score	A+	A+	A+	A+	A+
Management (Weight 30.8%)	A+	A+	A+	A+	A+
Shareholders (Weight 9.3%)	A	B+	B+	Α	Α
CSR Strategy (Weight 6.2%)	A+	A+	A+	Α	A+
Source: Refinitiv Eikon					

Figure 11 - Board Composition 2022



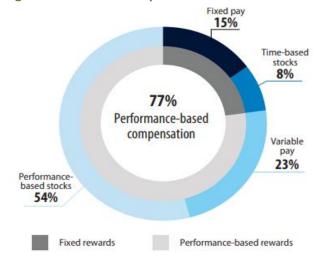
Source: Infosys Annual Report 2022

Governance considerations focus on the company's leadership, risk management, and ethical practices. Infosys has a strong commitment to ethical practices and has implemented various initiatives to ensure transparency, accountability, and compliance. This pillar is the most relevant to understand, as Infosys is an IT services company inserted in a developing market. This is also reflective on the company's priorities regarding ESG, such that several goals have been created to push them to be leaders in corporate governance, such as, building responsible supply chains, ensuring robust compliance and corporate practices, among others, all oversighted by

a ESG committee with quarterly reporting. The company has also received recognition for its corporate governance practices and has been included in various sustainability indices. These practices have resulted in a good performance (Figure 10) in the Governance pillar, with a few improvements across its different metrics, in particular Shareholders.

The executive leadership team at Infosys is a responsible for driving the company's strategic direction and growth, their composition can be analysed in figure 11. Salil Parekh serves as CEO and Managing Director, leading the company's overall operations and strategic initiatives. Nilanjan Roy serves as CFO, overseeing financial management, operations, and planning. Ravi Kumar, President, is responsible for Infosys' digital offerings and transformation initiatives. Mohit Joshi, President, focuses on strategic deals, partnerships, and alliances. The executive board is complemented by a group of independent directors who provide strategic guidance, advice, and oversight on the company's operations and financial performance. The independent directors include Kiran Mazumdar-Shaw, Michael Gibbs, D. Sundaram, Uri Levine, Bobby Parikh, and Chitra Nayak. The board's independent directors provide valuable insights, advice, and oversight on the company's operations, financial performance, and compliance with regulations. Together, the board and executive team work to ensure that Infosys continues to provide the highest level of service to its clients and maintains its position as a leader in the technology industry. This board is led by Chairman Nandan Nilekani, who works closely with the executive team to ensure that the company delivers innovative technology solutions and services to its clients (further details on the Board of Directors in the Appendixes).

Figure 12 - Current Compensation Plan of CEO



Source: Infosys Annual Report 2022

Regarding the executive compensation plan for the CEO (Figure 12), its composed of both fixed, and variable components. The fixed component includes an annual salary of INR 8 crore and a timebased RSU (restricted stock units) grant of INR 3 crore. The variable component includes an annual variable pay of INR 17 crore, subject to the Company's achievement of certain targets, performance-based RSU grants having a total value of INR 51.75 crore. The achievement targets cover revenue growth, operating margin, ESG priorities, and other annual parameters as determined by the Board or its Committee that follow the 2015 Incentive Compensation Plan. The RSUs will vest annually based on the achievement of certain strategic milestones, with some vesting happening in two tranches in 2025 and 2027.

#### **Controversies**

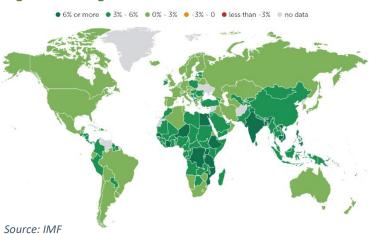
Infosys has faced several controversies in recent years, including allegations of bribery, corruption, fraud, insider dealing, and accounting irregularities. In 2019, Infosys settled with the Securities and Exchange Board of India (SEBI) for

\$34 million over allegations of insider trading. In 2020, the company faced a whistle-blower complaint alleging that top executives were engaged in unethical practices to boost short-term revenue and profits. Infosys denied the allegations but initiated an investigation into the matter. Additionally, in 2021, the company was fined \$3 million by the Securities and Exchange Commission (SEC) over alleged accounting violations. The most recent, in October 2022, regards the alleged cultural bias against certain ethnicities of candidates. Such controversies can damage the company's reputation, erode investor confidence, and potentially result in financial and legal consequences.

## **Industry Overview**

#### **Economic Outlook**

Figure 13 - Long Term Real GDP Growth Rate



For Infosys, a company with a significant presence in multiple geographic markets, a comprehensive understanding of regional economic trends is critical for anticipating shifts in demand, responding to regulatory changes, and identifying new growth opportunities. The global economy has faced numerous challenges in the past two years, including the COVID-19 pandemic, the Ukraine-Russia war, and liquidity troubles following a series of global bank crises. Although the impact of these crises appears to have been contained, they continue to undermine consumer and business confidence, impacting economic growth. Additionally, geopolitical crises,

supply chain reorientations, global inflation, and tight monetary policy conditions have also affected this analysis. This economic outlook is divided by the geographic segments in which Infosys operates, starting with India, the base of their operations, followed by Europe and United States, used as a proxy for North America. This analysis will examine the key macroeconomic factors affecting these regions, drawing on a range of sources, including economic indicators, market research, and expert/analyst insights, to provide a comprehensive view of the economic landscape.

Figure 14 - FDI tightening in India



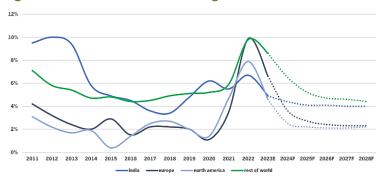
Source: The Reserve Bank of India

The World Bank has expressed concern over the current global economic downturn and predicts that it could lead to a "lost decade". Despite this grim forecast, many analysts believe that this could be a promising era for India. According to the International Monetary Fund (IMF), India is expected to experience a growth rate of 5.9% in FY 2023–24, and an average rate of 6.1% over the next five years (Figure 16). My overall assessment of the Indian economy is positive, as I anticipate that after 3 consecutive years of Foreign Direct Investment (FDI) slowdowns (Figure 14), the investment cycle will rebound, driving sustainable economic growth, and initiating a virtuous cycle of job creation, income, productivity, demand, and exports,

supported by favourable demographics in the medium term. Despite the global slowdown, exports have been performing well, possibly due to the devaluation of the currency against the dollar. While goods exports remained modest, India's services exports experienced a growth of 30% between April 2022 and February 2023. This can be attributed to a strong push towards digitization, cost-cutting measures by businesses in response to the impending slowdown, and the growing trend of remote work, which has increased the demand for exports of technology services where India has a comparative advantage. The share of business and professional services in total services exports also increased, as companies globally now prefer to outsource a wide range of professions, including accounting, audit, R&D, quality assurance, and after-sales service. With regard to policymakers, including the Reserve Bank of India (RBI), are expected to balance stability and growth, cautioning that excessive tightening of monetary policy could lead to low

credit availability, investment, and supply, ultimately leading to further inflation. A well-balanced monetary policy is necessary to contain inflation while considering economic growth (Figure 15). In addition, the government must increase spending on infrastructure to address the investment gap caused by low private and foreign investment. Finally, India must capitalize on the rising demand for services to attract more investment and establish a robust and efficient ecosystem that will entice more multinationals to invest in the country.

Figure 15 - Inflation rate across Regions



Source: Own Estimates & IME

The European economy has been slowing since mid-2022, as inflation continues to exceed nominal wage growth and act as a drag on consumption. While I anticipate inflation in Europe to fall relatively quickly during 2023, in annual terms, it will still remain elevated. Specifically, inflation in the euro area is projected to reach 6.1%, with some countries continuing to see double-digit figures in 2023. Although inflation in the euro area is expected to reach the European Central Bank (ECB) target of 2% in the second half of 2024, core inflation may

remain higher until the second half of 2025 (Figure 15). For many European countries, price growth will remain above central bank targets until 2025 and for some, even beyond. It is worth noting that the current tightening cycle is already the strongest in ECB history, with rising interest rates also taking their toll. Despite this, economic growth has surprised on the upside, with stagnant GDP in Q4 2022 and very modest growth in Q1 2023 (at around 0.3%) quelling previous expectations of an imminent recession. While the banking stress that hit financial markets during March 2023 caused concern, recent data suggests that financial tensions have so far made little impression on consumers and businesses. Consequently, most European economies are expected to avoid GDP contraction in 2023. Looking ahead, GDP growth in Europe is expected to decrease from 2.4% in 2022 to 0.6% this year, before recovering to 1.5% in 2024 and 2.0% in 2025 (Figure 16). Nonetheless, growth is expected to be slower than the pre-pandemic 2015-19 average of 2.1%, with European economies remaining well below pre-Covid trends. This highlights the long-term negative effects of the pandemic and the war in Ukraine on the European economy.

Figure 16 - Real GDP growth across Regions



In the United States, the probability of a recession has increased, owing to heightened financial market volatility, tightening credit conditions, and economic uncertainty. Real GDP is predicted to grow by 1.6% in 2023 and 1.1% in 2024, following a 2.3% increase in 2022 (Figure 16). The confluence of consistently high prices, interest rates, and now tightening credit conditions will dampen business investment and consumer spending in the upcoming months. Although the economy is currently not demonstrating broad-based economic

imbalances, recessions are frequently nonlinear psychological events that transpire rapidly. Headline Consumer Price Index (CPI) inflation has declined by 1.0% to around 5.0% year over year - its lowest since May 2021. Core CPI inflation rose by 0.1% to 5.6%, but it remains 1.0% below its peak in September 2022. Slower growth in the final demand for goods and services, declining housing price inflation, and moderate wage growth should combine to produce faster disinflation than what was anticipated by the Fed policymakers. I envisage inflation falling with an accelerating momentum this year, but core inflation is expected to close the year at approximately 4.6%, significantly above the Fed's 2% inflation target, although it is anticipated to smooth out to 2.5% by 2024 (Figure 15). Although labour market conditions still appear relatively resilient, an abrupt shift in sentiment along with a rapid tightening of financial conditions could prompt a recession, with businesses and consumers retrenching. Moreover, the increasing need to raise the debt ceiling represents an additional risk to the American outlook. A failure to raise or suspend the debt ceiling could trigger severe financial market turbulence and potentially lead to a self-inflicted recession, possibly impacting the future of the dollar as the reserve currency.

#### **Industry Analysis**

Figure 17 - IT Services growth by Region - 2022-2027

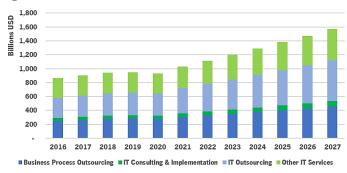


The technology services industry is a rapidly growing (Figure 17) and constantly evolving sector that provides a wide range of IT solutions and services to businesses across various industries. The industry encompasses companies that offer managed services, cloud solutions, cybersecurity, software development, consulting, and other related services. One of the key drivers of growth in the technology services industry is the increasing demand for digital transformation and automation in businesses. Companies are increasingly looking to adopt new technologies such as artificial intelligence, cloud computing, and the Internet of

Things to improve their operations, reduce costs, and enhance their customer experiences. This trend is expected to continue to drive demand for technology services in the coming years.

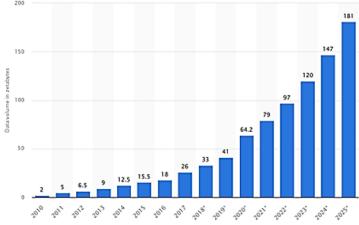
The outlook for the technology services sector is positive, with strong growth expected in the coming years (Figure 18). According to a Statista report, the global technology services market is expected to grow at a compound annual growth rate (CAGR) of around 7% between 2023 and 2027, with India reaching 11%. The report cites factors such as the increasing adoption of cloud computing, the GDP and its sector composition, internet penetration, the level of digitization, and the attitude toward IT security as key drivers of growth.

Figure 18 - IT Services Revenue Worldwide - 2016 - 2025



Source: Statista

Figure 19 - Volume of Data created/consumed worldwide - 2010-2025 (in zettabytes)



Source: Statista

In addition to the increasing demand for technology services, another factor that is likely to drive growth in the sector is the growing need for companies to address cybersecurity threats. Cybersecurity has become an increasingly important issue for businesses of all sizes, and many companies are looking to technology services providers for help in protecting their data and networks.

However, the technology services sector is not immune to economic risks and uncertainties. Factors such as geopolitical tensions, changes in government regulations, and economic downturns can all impact the industry's growth and profitability.

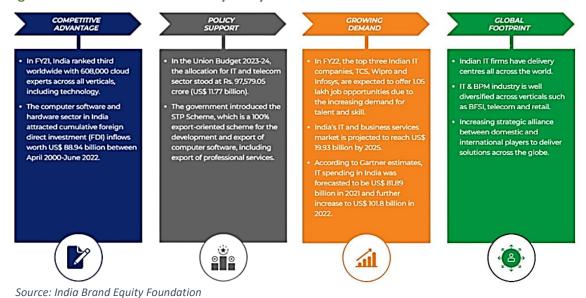
In terms of competition, the technology services industry is highly competitive, with many established players and new entrants vying for market share. Competition is primarily based on factors such as pricing, quality of service, technology expertise, and customer relationships. Many companies in the industry have also been investing in mergers and acquisitions to expand their capabilities and offerings, which has led to further consolidation in the industry.

Another trend in the technology services industry is the increasing focus on sustainability and social

responsibility. Customers are increasingly looking for technology solutions providers that have strong environmental and social practices, and companies that can demonstrate their commitment to sustainability and social responsibility are likely to have a competitive advantage.

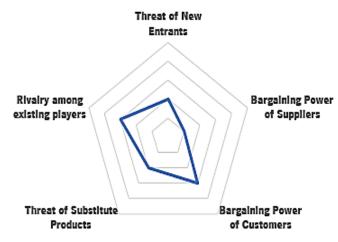
Overall, the technology services industry is a rapidly growing and competitive sector that is expected to continue to experience strong demand in the coming years, also demonstrated by the exponential speed at which new data is being consumed and generated (Figure 19). Companies such as Infosys that can demonstrate their ability to provide high-quality technology solutions and services while also focusing on sustainability and social responsibility are likely to be well-positioned for success in the industry. In the figure below it's shown some of the key bullet points of the Indian IT (and Business Process Management) industries, including some government policies to boost India's competitive positioning, as well as on the economic prospect and job creation dimension.

Figure 20 - Indian IT & BPM Industry Analysis



## **Competitive Positioning (Porter's 5 Forces)**

Figure 21 - Porter's 5 Forces



Source: Own Estimates

#### Threat of New Entrants: LOW/MODERATE

The technology services industry is highly competitive, with many established players and new entrants vying for market share (Figure 22). However, barriers to entry are high due to the need for significant investments in technology, infrastructure, and human resources. Infosys has a strong brand reputation, a large workforce, and an established customer base, which may make it more difficult for new entrants to compete.

#### **Bargaining Power of Suppliers: LOW**

The bargaining power of suppliers in the IT industry is relatively low as there are many suppliers in the market, and most of the inputs are standardized. Infosys has many vendors for hardware, software, and

other inputs. However, suppliers of specialized or proprietary software or hardware may have more bargaining power. Infosys may be able to mitigate this risk by developing in-house expertise or forming strategic partnerships with key suppliers.

#### **Bargaining Power of Customers: MODERATE**

The bargaining power of buyers in the technology services industry is relatively high, as customers have many options to choose from and can easily switch providers. Infosys may need to compete on factors such as pricing, quality of service, and technology expertise to retain customers and attract new ones.

Figure 22 - IT Services Market Concentration



#### Threat of Substitute Products: LOW/MODERATE

The threat of substitutes in the technology services industry is moderate. The IT industry is constantly evolving, and new technologies and services are emerging. Clients may choose to substitute Infosys' services with those offered by its competitors or new entrants in the market. Additionally, clients may choose to develop their own IT capabilities, reducing the demand for outsourcing services. However, outsourcing technology services is often more cost-effective and efficient, which may mitigate the threat of substitutes for Infosys.

#### Rivalry among existing players: MODERATE

Infosys faces competition from other large players such as TCS, Wipro, and Accenture, as well as smaller companies and start-ups. Competition is primarily based on factors such as pricing, quality of service, technology expertise, and customer relationships. Infosys may need to differentiate itself through innovative services or strategic partnerships to maintain its competitive edge.

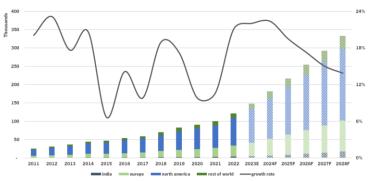
## **Financial Analysis**

Figure 23 - Profit & Losses until OPBI by IFRS level 1

in million Rupees	2022	2023E	2024F	2025F	2026F	2027F	2028F
Revenue	1,216,410	1,484,196	1,816,206	2,170,242	2,545,103	2,927,855	3,334,380
00GS	819,980	1,037,453	1,269,528	1,516,999	1,779,027	2,046,570	2,330,732
Gross Profit	396,430	446,743	546,678	653,243	766,076	881,284	1,003,648
Gross Margin (%)	32.6%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%
SGA	114,580	155,389	190,149	227,215	266,461	306,534	349,096
Other op. income	1,700	1,700	1,700	1,700	1,700	1,700	1,700
Operating Profit	280,150	289,654	354,829	424,328	497,914	573,050	652,853
Operating Margin (%)	23.0%	19.5%	19.5%	19.6%	19.6%	19.6%	19.6%

Source: Own Estimates

Figure 24 - Infosys' Revenue by Region & CAGR

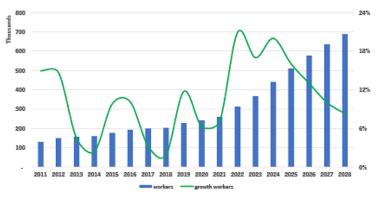


Source: Infosys Annual Reports & Own Estimates

In financial analysis, a top-down approach was employed to analyse Infosys, taking into account the diverse range of clients and industries in which they operate. The key factor in their performance is their Revenues, which were forecasted by initially separating the source by region – North America, Europe, India, and Rest of World (Figure 24). The annual real GDP growth rate and inflation rate for each region, obtained from historical data since 2011, as well as the expected values up to 2027, were extracted from IMF predictions. The annual real GDP growth rate and inflation rate for each region, obtained from

historical data since 2011, as well as the expected values up to 2027, were extracted from IMF predictions, and combined in order to obtain the nominal growth rate. That rate was then combined with the growth in total workforce in Infosys (Figure 25), as the company's operations are based in India, and a significant portion of their operating performance comes from the revenue each employee can generate per client. An additional factor was considered, regarding the increase in productivity per worker, as more processes are implemented, economies of scale reached across several industries as well as for the increased average education in Indian workforce. For this factor, the historical increase in revenues per worker (from 2011 to 2022) was assumed constant. This led to the development of a "multiplier" that

Figure 25 - Infosys Workforce Evolution

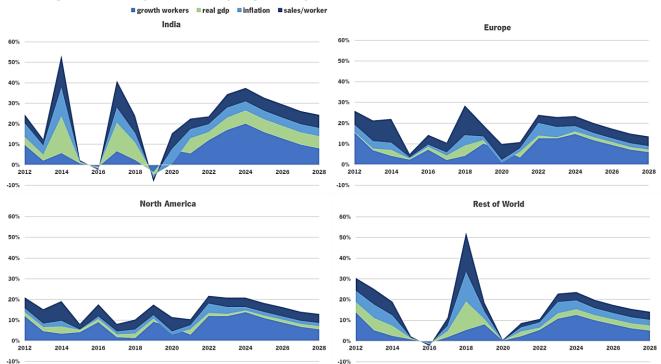


Source: Infosys Annual Reports & Own Estimates

reflect the combined effect on the growth of Infosys' operating model (dependant on growth of work force), their clients' regional economic growth (dependent on nominal GDP growth) and the increased productivity (dependent on revenue generated by worker). Linear regression was performed for each region between the historical sales growth and the historical multiplier, which produced highly positive econometric results with extremely low p-values (between 1% in India and (6.4\*10<sup>-7</sup>) % in North America) and high R squared values (between 44% in India and 92% in North America). The multiplier's coefficient and forecasted growth in workforce were then used to determine the expected revenues (the detailed values for this

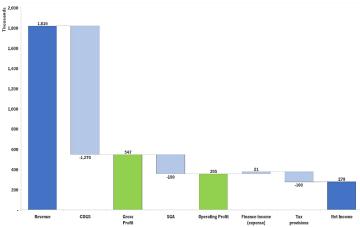
estimation are displayed in the Appendixes). In the figure below its displayed the Revenues split by Region and by growth factor for both the historical values and for the defined growth period.

Figure 26 - Infosys' Revenue by Region & by Factor



Source: Infosys Annual Reports & Own Estimates

Figure 27 - Infosys 2024 Net Profit Waterfall



Source: Own Estimates

Moving onto the Profit & Loss (P&L) analysis, one of the key assumptions made was the stability of Infosys' operations, where it was assumed that the gross profit margin would remain constant at 30.1% from FY 2023 estimates for the near future. For the selling, general, and administrative (SGA) expenses, it was assumed that each component would assume its 5-year average percentage of sales. Interest expenses were dependent on the total value of borrowings and leases, and as such, were solely dependent on their growth rate with the assumption of a constant cost of debt. The tax rate was another assumption made during the valuation process, which was kept constant

at FY 2022 levels of 26.4%. In figure 27 its represented in a waterfall graph the process from Revenues up to Net Income. Depreciations and amortizations were growing at the same rate as non-current assets, assuming constant rates of depreciation. As for the depreciation of right of use assets, they were kept at a constant historical percentage of sales. Working capital was calculated as the difference between current assets and current liabilities, with the change in working capital representing the increase/decrease in capital employed in the operating process of Infosys. Capital Expenses (CapEx) were calculated by summing the depreciations & amortizations and the change in property, plant, and equipment (PPE), encompassing the increased need for more assets to sustain future growth and profitability. Regarding the PPE assumptions, "Land" and "Construction in Progress" were kept constant, due to both the immateriality in the overall value and growth of the metric, and the inability to estimate them. The "Buildings", "Machinery/Equipment" and "Other PPE" were assumed to grow at the same rate as the workforce – the main assumption in Revenue, keeping both metrics intrinsically connected. In figure 28 its observable the evolution of CapEx, and its components.

Figure 28 - Capital Expenditures Breakdown: PPE & Depreciations



Source: Infosys Annual Report & Own Estimates

As for the Balance Sheet, the analysis starts with the estimation of Accounts Receivable, using the 5-year average turnover ratio to sales due to the consistency of payment terms. Goodwill and Intangible Assets are held constant due to the inability to estimate their value. Long-term Investments are growing at a defined rate of 10%, which mirrors the growth of other assets and the operating performance of the company. Long-term Receivables are assumed to be constant as a percentage of total receivables. Cash & Equivalents are kept as a control metric, with their value balancing the Assets and Liabilities. Moving on to the Liabilities side, the analysis estimates the value of Accounts Payable

using the 5-year average turnover ratio to cost of sales. Accrued Expenses are kept at the 5-year historical percentage average of operating expenses. Leases and Borrowings are growing at a defined rate of 10%, which is consistent with other metric assumptions and reflects the capital needs to sustain growth and profitability. Lastly, for Shareholders' Equity, Retained Earnings are estimated by taking the last year transitory value, summing the retained earnings of the current period, subtracting the dividends paid (at a pay-out of 59.3% – historical average), and subtracting the increase in non-Current Assets, reflecting the outflow of capital for investment needs. Common Stock and Paid-in-Capital are held constant.

#### **Ratio Analysis**

Figure 29 - Infosys Ratios Evolution

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Profitability											
Gross Margin	36.0%	34.8%	33.1%	34.9%	32.6%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%
Operating Margin	24.1%	22.0%	21.3%	24.5%	23.0%	19.5%	19.5%	19.6%	19.6%	19.6%	19.6%
EBITDA Margin	26.8%	24.4%	24.5%	27.8%	25.9%	22.0%	21.7%	21.5%	21.4%	21.3%	21.2%
Effective Tax Rate	20.9%	26.8%	24.4%	27.1%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Net Margin	22.7%	18.6%	18.3%	19.3%	18.2%	15.5%	15.3%	15.2%	15.0%	14.9%	14.9%
Liquidity											
Current Ratio	3.55	2.84	2.62	2.54	2.00	2.06	1.98	1.94	1.94	1.97	2.02
Interest Coverage			114.0	139.9	160.1	150.5	167.6	182.2	194.3	203.3	210.6
Solvency											
Assets/Equity	1.23	1.30	1.42	1.42	1.56	1.56	1.59	1.61	1.61	1.61	1.61
Debt/Equity			7.1%	7.0%	7.3%	7.3%	7.4%	7.4%	7.3%	7.2%	7.1%
% LT Debt to Total Capital			5.8%	5.7%	5.8%	5.8%	5.9%	5.9%	5.8%	5.7%	5.6%
Activity											
A/R Turnover	3.6	3.6	3.3	3.4	3.3	3.6	3.6	3.6	3.6	3.6	3.6
Days Sales Outstanding	100.6	102.7	112.2	107.9	111.8	100.4	100.4	100.4	100.4	100.4	100.4
A/P Turnover	-	-	27.0	23.8	24.2	25.0	25.0	25.0	25.0	25.0	25.0
Days Payable Outstanding	-	-	13.5	15.3	15.1	14.6	14.6	14.6	14.6	14.6	14.6
Cash Cycle (Days)	-	-	98.7	92.5	96.7	85.8	85.8	85.8	85.8	85.8	85.8
ROE	24.7%	23.7%	25.5%	27.3%	29.1%	29.2%	32.4%	35.1%	36.9%	37.9%	38.3%
ROA	20.1%	18.7%	18.7%	19.2%	19.5%	18.7%	20.5%	21.9%	22.9%	23.5%	23.8%
ROIC			23.7%	23.7%	27.4%	26.0%	29.0%	31.2%	32.7%	33.4%	33.8%
Revenue per Employee (INR)	3,487,123	3,825,510	3,859,390	4,002,948	4,241,067	4,039,754	4,119,530	4,243,583	4,404,041	4,605,777	4,843,931

Source: Refinitiv Eikon & Own Estimates

The evaluation of a company's financial health and performance is crucial to determine its ability to thrive in a competitive market. In this segment, I aim to conduct a comprehensive analysis of Infosys using various financial ratios to evaluate its performance and position in the industry. Firstly, I will delve into the historical evolution of Infosys's profitability, liquidity, solvency, and activity ratios (Figure 29). These ratios will provide insight into Infosys's financial trends over time and identify areas of strength and weakness.

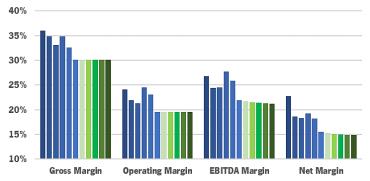
Figure 30 - Ratio Comparison with Peers and Industry

	Infosys Ltd	Industry Average	Tata Consultancy Services Ltd	HCL Technologies Ltd	Wipro Ltd	LTIMindtree Ltd	Tech Mahindra Ltd	Mphasis Ltd	Persistent Systems Ltd
Profitability									
Gross Margin	32.6%	76.0%	99.4%	83.2%	29.7%	84.3%	6 84.1%	97.0%	82.8%
Operating Margin	23.0%	22.2%	25.3%	18.9%	17.7%	17.3%	6 14.7%	15.3%	14.0%
EBITDA Margin	25.9%	25.2%	27.7%	24.0%	21.1%	19.5%	6 18.1%	17.7%	17.2%
Effective Tax Rate	26.4%	24.5%	25.6%	20.2%	19.1%	25.8%	6 24.4%	25.2%	25.3%
Net Margin	18.2%	18.0%	20.1%	15.8%	15.5%	14.7%	6 12.6%	12.0%	12.1%
Liquidity									
Current Ratio	2.00	2.38	2.56	2.56	2.01	3.04	1.96	1.96	1.99
Interest Coverage	160.1	95.5	93.3	89.5	25.5	45.0	46.4	24.6	96.8
Solvency									
Assets/ Equity	1.56	1.56	1.59	1.44	1.64	1.41	1.67	1.55	1.61
Debt/ Equity	7.3%	10.6%	9.0%	10.0%	27.0%	9.0%	6 10.0%	18.0%	17.0%
%LT Debt to Total Capital	5.8%	6.7%	6.5%	8.2%	8.6%	6.9%	6 2.9%	7.1%	9.9%
Activity									
A/RTurnover	3.3	3.5	3.5	3.5	3.9	4	3.5	4.7	4.6
Days Sales Outstanding	111.8	103.4	103.9	105.5	93.8	91.2	103.3	78.3	79.6
A/P Turnover	24.2	8.1	0.1	5.4	21.3	7.8	2.1	0.5	2.8
Days Payable Outstanding	15.1	65*	2502.7	67.4	17.1	46.8	177.4	737.5	130.9
Cash Cycle (Days)	96.7	86.9*	2337.0	44.0	77.5	44.3	72.4	603.4	51.4
ROE	29.1%	33.1%	43.0%	21.8%	18.6%	26.1%	6 20.7%	20.6%	20.5%
ROA	19.5%	21.3%	27.1%	15.2%	11.3%	18.4%	6 12.4%	13.3%	12.8%
ROC	27.4%	30.2%	39.5%	19.8%	14.6%	23.8%	6 18.9%	17.5%	17.5%
Revenue per Employee (INR)	4,241,067	3,891,638	3,548,227	4,533,550	3,595,155	3,792,084	3,280,057	8,190,526	4,316,676
,	*,	without Tata, to big	g of an outlier						

Source: Refinitiv Eikon & Own Estimates

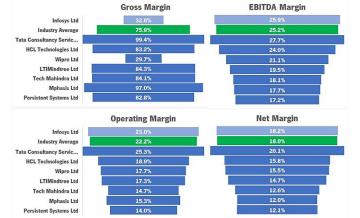
Additionally, I will compare Infosys's financial ratios with its peers in the industry to identify its relative performance and position (Figure 30). By benchmarking Infosys's performance against its competitors, I can assess its competitive advantage, market position, and potential areas for improvement. This analysis will offer a holistic view of Infosys's financial performance and provide key insights for investors, analysts, and stakeholders to make informed decisions about the company's future.

Figure 31 - Infosys' Profitability Ratios Evolution – 2018-2028



Source: Refinitiv Eikon & Own Estimates

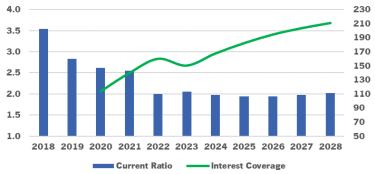
Figure 32 - Profitability Ratios Comparison to Peers & Industry



Source: Refinitiv Eikon & Own Estimates

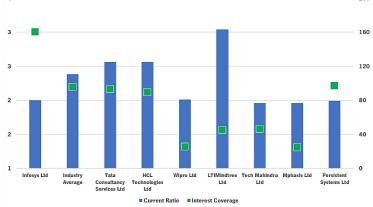
In terms of profitability metrics (Figure 31), I begin with the Gross Profit Margin, which serves as a key assumption in the top-down approach to valuing Infosys. It was assumed that the Gross Margin would remain constant at the FY 2023 estimate of 30.1%, which has already been disclosed by the company. However, I observe a decline in profitability in the Operating Profit Margin, owing not only to a drop in gross margin but also an increase in costs in Selling, General, and Administrative (SG&A) expenses (11% from FY 2022 to FY 2023). The EBITDA Margin also exhibits a decline in gross profitability, although not as severe, as the growth of depreciations is compensating for it. The final profitability metric is Net Margin, which reveals a 2.7% decline in the margin, with 84% of that being caused by the loss in profitability and 16% due to increased SG&A costs. This is followed by a downward trend that stabilizes around the 15% margin. When carried out an industry analysis (Figure 32), I observe that Infosys enjoys an edge over its peers, with all margins slightly above their average. The Operating profit margin and the EBITDA margin are both 3% above the industry, while the net margin is up by only 1.2%. The only company that rivals Infosys ratios is the market leader of Indian IT services, Tata Consultancy. Gross Margin is a relatively poor metric to compare since the ratios are significantly different. One possible explanation for this discrepancy may lie in the capitalization of several expenses, which moves certain items from operating expenses to financial expenses. Infosys' tax rate also appears to be the highest among its peers.

Figure 33 - Infosys' Liquidity Ratios Evolution



Source: Refinitiv Eikon & Own Estimates

Figure 34 – Liquidity Ratios Comparison to Peers & Industry



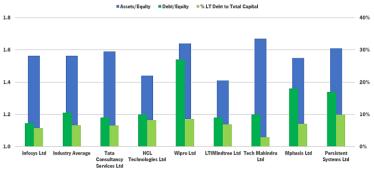
Source: Refinitiv Eikon & Own Estimates

Figure 35 - Infosys' Solvency Ratios Evolution



Source: Refinitiv Eikon & Own Estimates

Figure 36 - Solvency Ratios Comparison to Peers & Industry

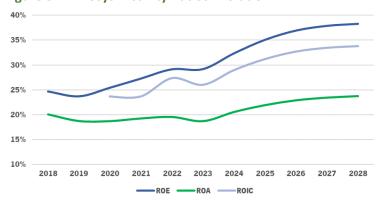


Source: Refinitiv Eikon & Own Estimates

In analysing Infosys's liquidity ratios (Figure 33), I first examine the Current Ratio, a measure of the company's ability to meet its short-term obligations with its short-term assets. The historical values of this ratio show a rapid decline, followed by a stabilization around the FY 2022 value. However, it is important to note that this trend is not indicative of any immediate concerns, as the company's current ratio remains well above the industry average. Moving on to the interest coverage ratio, which indicates the company's ability to cover its interest expenses with its earnings before interest and taxes (EBIT), I observe a rapid increase in its multiple. This is due to Infosys's predominantly equity-based capital structure, which has outpaced the growth of its debt. It is worth noting that the first two years of data are missing, as they do not take into account the impact of IFRS 16 - the capitalization of leases - which would skew the results. In comparison to its peers (Figure 34), Infosys performs well in both the current ratio and interest coverage ratio. However, the company's historical values for the current ratio were closer to industry levels in previous years, and it is expected that this trend will continue in the future. On the other hand, the interest coverage ratio is largely influenced by Infosys's below-average debt ratio, indicating that the company's capital structure may deviate from the industry norm. Overall, Infosys's liquidity ratios are strong, indicating the company's ability to meet its short-term obligations and manage its debt effectively.

Turning to the solvency analysis (Figure 35), the Assets to Equity ratio of Infosys has been on a consistent upward trend since the start of the analysed period, expected to stabilize around the industry average of 1.60. In contrast, the Debt-to-Equity ratio is expected to remain at the same target of 7%, with only minor fluctuations, and the percentage of long-term debt to total capital is anticipated to maintain its historical range of 5.7-5.8%. It appears that Infosys has already established a well-defined and optimized capital structure tailored to its operations, and absent any significant market or industry changes, it is projected to maintain its current levels. In regard to peer analysis (Figure 36), it is evident that the most stable dimension across companies is the Assets to Equity ratio. Among the three largest players in the IT industry, which includes Infosys, this ratio is approximately equal to 1.5-1.6, which may indicate an optimal capital structure. Furthermore, in regard to the Debt-to-Equity ratio, Infosys has adopted a significantly different approach than its peers by carrying less debt and leases on its balance sheet, which could impact its return and potentially earn less than other more leveraged companies. Finally, the (percentage) of long-term debt to capital, which is similar to the Debt-to-Equity ratio but focuses only on debt and leases over one year, shows that the primary difference between Infosys and its peers is the amount of short-term debt. Specifically, the difference in the Debt-to-Equity ratio between Infosys and its peers is 32%, of which 14% is attributable to long-term debt, and 18% is attributed to short-term debt.

Figure 37 - Infosys' Activity Ratios Evolution

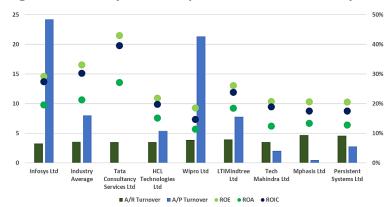


Source: Refinitiv Eikon & Own Estimates

Moving on to the analysis of activity ratios (Figure 37), it is worth noting that certain assumptions regarding operating activities are made in the valuation process and therefore, are kept constant throughout the periods analysed. Specifically, Accounts Receivables and Accounts Payables are two such assumptions, consequently, so are Days Sales Outstanding (DSO), Days Payable Outstanding (DPO), and the Cash Cycle (DSO - DPO). Regarding the Return on Equity, Infosys has shown steady growth since FY 2019, with a current value of 29.2% and an expected increase to 36% by FY 2028. The Return on Assets has also been

increasing, albeit at a more moderate rate, with a current value of 18.2% and an expected value of 22.4% by FY 2028. The Return on Invested Capital is also demonstrating a similar upward trend, with a current value of 26.9% and an expected value of 33.6% by FY 2028. In terms of revenue per worker, Infosys has been demonstrating consistent productivity gains, with an historical average increase of 6.5% per year, and expected future growth of about 3%. This aligns with market estimates of productivity growth in the Indian IT sector. Compared to its peers, Infosys workers have a return that is 9% higher than the industry average. However, it is worth noting that this figure is lower than the two smallest peers, although their market capitalization represents only 6% of Infosys.

Figure 38 - Activity Ratio Comparison to Peers & Industry



Source: Refinitiv Eikon & Own Estimates

In figure 38 it's shown the comparison on receivables turnover and days sales outstanding (DSO), the results are homogenous, with only the smaller capitalized companies experiencing higher rates. The payables turnover and days payables outstanding (DPO) show a significant difference between Infosys and its peers, with Tata being a huge outlier and therefore excluded from the average. This leads to two possible conclusions regarding Infosys standing: either Infosys has very constrained payment terms to its suppliers, or they do not rely on trade credit to finance their operations. When comparing the return on equity (ROE), return on assets (ROA), and return on

invested capital (ROIC) their results manifest similar interpretations. The industry average is being driven upwards solely by Tata Consultancy, with their high returns and market capitalization. This makes it appear that Infosys is below average when in reality, they are the second-best company in those metrics by a comfortable margin. Overall, Infosys has performed well in activity ratios, particularly in Return on Equity, Return on Assets, and Return on Invested Capital, demonstrating consistent growth trends. While the payables turnover and days payables outstanding (DPO) show a significant difference from its peers, the reasons behind this disparity are unclear, and further analysis may be necessary to uncover underlying factors.

#### Valuation

The valuation process entails a comprehensive analysis of multiple components that impact Infosys as a business operating in diverse countries and industries, exposed to various sources of risk and opportunities. To begin with, the estimation of the cost of capital is crucial, as it measures the market-required rate of return as a firm. The process is visually described in Figure 39 and it starts with the calculation of the cost of debt, which takes into account the risk-free rate, assumed here as the 10-year US Treasury rate long-term average, and the country risk premium (CRP) for the Indian market, extracted from Professor Aswath Damodaran's datasets from January 2023, and is obtained through the rating of India's Credit Default Swaps (CDSs) as all of Infosys' debt is written in Indian rupees. The tax shield effect of debt, using the FY 2022 effective tax rate, is also incorporated to arrive at the after-tax cost of debt for Infosys, which is 5.92%.

Figure 39 - Cost of Capital Calculations for Infosys

Cost of Debt -		India								
Risk Free Rate		4.26%								
Country Risk Premium		3.7	79%							
Pre-tax Cost of Debt		8.05%								
Tax rate		26.45%								
After Tax Cost of Debt		5.9	2%							
Cost of Equity -	North America	Europe	India	Rest of World						
Risk Free Rate		4.2	26%							
Beta Unlevered	1.26	1.04	1.14	1.26						
Beta Levered	1.33	1.10	1.20	1.33						
Equity Risk Premium	5.94%	5.94% 7.45% 9.73% 7.91%								
Regional Cost of Equity	12.15%	12.42%	15.96%	14.78%						
% Revenues	61.70%	24.77%	2.95%	10.58%						
Cost of Equity		12.0	60%							
Cost of Equity		12.	60%							
Equity to Enterprise Value		93.	.2%							

5 92%

6.8%

12.15%

Source: Aswath Damodaran's Website/Databases & Own Estimates

Cost of Debt (after tax)

Debt to Enterprise Value

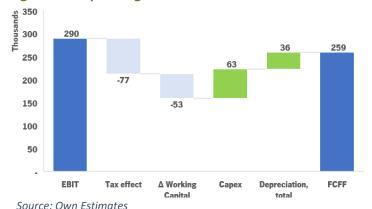
WACC

Next, the cost of equity is determined as a weighted average of the revenues split by region, recognizing that different economies require different rates of return. The calculation is done using the CAPM model, with the unlevered beta for Infosys' industry, IT services, obtained from Professor Aswath Damodaran's datasets and levered using the Debt-to-Equity ratio based on FY 2022 values. The equity risk premium for each corresponding region, also from Professor Aswath Damodaran's datasets, is multiplied by the beta and added to the risk-free rate to arrive at the region's cost of equity. The overall cost of equity for the firm is estimated to be 12.6%.

To arrive at the cost of capital (WACC), the debt and equity are weighted relative to the total enterprise value. With an Equity to EV of 93.2% and Debt to EV of 6.8%, the resulting cost of capital is 12.15%.

The next step in the valuation process is estimating the Free Cash Flow to the Firm (FCFF), which measures the cash flows that both debt holders and shareholders are entitled to. The FCFF is calculated by adding back the depreciation to the after-tax operating profit and then subtracting the change in working capital and the capital expenses, which are both indicators of reinvestment in the company, this process is represented by the waterfall in Figure 40. This process is done for the defined growth period, which runs from FY 2023 to FY 2028 (Figure 41).

Figure 40 – Operating Profit to Free Cashflow



The Terminal Value is the present value of future cash flows beyond the defined growth period, i.e., from FY 2029 and beyond. The Terminal Value is calculated by applying a perpetual growth formula to the FCFF of FY 2028, using the WACC as a discount rate and a growth rate for the perpetuity cash flows. The growth factor is estimated using the resulting methodology from Revenues, with the long-term targets on both inflation and Real GDP growth, as well as the 2011-2022 CAGR for both workforce and productivity, weighted by the expected revenues after FY 2028 in each region. The resulting long-term growth factor is 5.78%.

Figure 41 - Operating Profit to Free Cashflow: Evolution



Source: Own Estimates

Based on the valuation process outlined in this text, the estimated intrinsic value of Infosys is 1566.1 INR. As of today (May 29th, 2023), the market price of Infosys was 1315.0 INR, indicating that the stock is currently Undervalued, with an upside of 18.3%. However, it's important to note that the final share price will depend on various factors, including market sentiment and future business performance. Nonetheless, a thorough valuation process can provide investors with a more informed perspective on the potential value of investing in Infosys. A Monte Carlo Simulation is presented at the end of sensitivity analysis with the purpose of testing the price sensitivity of Infosys' shares.

#### **Relative Valuation**

Figure 42 - Infosys Pricing Ratios with Peers

		Infosys Ltd		a Consultancy Services Ltd	Tex	HCL chnologies Ltd		Wipro Ltd	LT	1Mindtree Ltd	Τe	och Mahindra Ltd	ı	Mphasis Ltd		Persistent ystems Ltd
Enterprise Value	₹	5,270,367	₹	11,783,300	₹	2,952,028	₹	2,032,400	₹	1,448,170	₹	1,034,403	₹	360,809	₹	375,594
Price to Sales (P/S)		4.47		6.34		3.56		2.77		9.42		2.43		3.10		6.64
Price to Earnings per Share (P/E)		24.60		31.70		22.59		17.93		64.26		19.49		25.92		54.93
Price to Free Cashflow (P/ FCFF)		17.02		26.22		16.51		15.02		51.04		9.14		15.24		22.53
Enterprise Value to Sales (EV/S)		4.33		6.15		3.45		2.57		9.24		2.32		3.02		6.58
Enterprise Value to EBIT (EV/ EBIT)		18.81		24.32		18.22		14.49		53.43		15.81		19.75		47.02
Enterprise Value to EBITDA (EV/ EBITDA)		16.74		22.21		14.38		12.96		47.24		12.85		17.04		38.93
Enterprise Value to Invested Capital (EV/IC)		6.52		12.15		4.32		2.44		15.01		3.51		4.40		9.52

Source: Refinitiv Eikon & Own Estimates

Figure 43 - Infosys Relative Valuation

	% undervalued/ overvalued	% undervalued/ overvalued	Infosys Pricing Value	Infosys Ltd	Industry Average
Enterprise Value	to DCF valuation	to current price		₹ 5,257,747	
Price to Sales (P/S)	-0.5%	18.6%	1,559.0	4.50	5.30
Price to Earnings per Share (P/E)	1.1%	20.4%	1,583.7	24.77	29.64
Price to Free Cashflow (P/FCFF)	12.2%	33.6%	1,756.6	17.15	22.75
Enterprise Value to Sales (EV/S)	-4.0%	14.3%	1,503.2	4.32	5.11
Enterprise Value to EBIT (EV/EBIT)	-0.1%	19.0%	1,564.4	18.77	23.11
Enterprise Value to EBITDA (EV/EBITDA)	-0.4%	18.7%	1,560.3	16.70	20.50
Enterprise Value to Invested Capital (EV/IC)	10.7%	31.9%	1,734.3	6.51	8.88

Source: Refinitiv Eikon & Own Estimates

Relative valuation is an alternative methodology to traditional Discounted Cash Flow (DCF) models for valuing a company. This approach uses market multiples as an indicator of how much a security is undervalued or overvalued compared to its industry peers (Figure 42). The central principle of relative valuation is that assets with similar characteristics should have

valuations. As such, it provides a means for investors to compare a company's valuation to its industry average in a specific metric. To calculate the industry average, I used the weighted average of the total market capitalization of all peers and Infosys.

The results of Relative Valuation are exposed on Figure 43. Starting with the analysis of the comparison to the current share price, I first analysed the Price to Sales (P/S) ratio, which measures a company's market capitalization to its sales volume. My findings indicate that Infosys undervalued by 18.56% when compared to the current price. Next, I examined the Price to Earnings (P/E) ratio, which measures a company's net income relative to its market capitalization. My analysis reveals that Infosys is undervalued relative to its peers by 20.43%. This significant price discount highlights Infosys's superior ability to convert sales into net profits. I then evaluated the Price to Free Cashflow (P/FCFF) ratio, which assesses the cash flows attributable to debt holders and shareholders relative to a company's market capitalization. My results demonstrate that Infosys is undervalued compared to the industry by 33.58%, making it an attractive investment opportunity for all types of investors – both debt holders and shareholders.

Moving on to Enterprise Value (EV) ratios, I examined the EV to Sales (EV/S) ratio, which, similar to the P/S ratio, compares a company's enterprise value to its sales volume. Infosys was found to be undervalued by 14.31%, which is lower than the previous metric. This finding suggests that the market values the equity of Infosys more highly than its overall enterprise value, likely due to factors such as strong growth prospects, brand strength, or a competitive advantage in the market. In addition, I analysed the EV/EBIT and EV/EBITDA ratios. My results indicate that Infosys is undervalued by 18.97% and 18.65%, respectively, further supporting the conclusion that Infosys is undervalued relative to its peers. Finally, I examined the EV to Invested Capital (IC) ratio, which measures a company's total invested capital (book values of equity and long-term debt) relative to its current worth. My findings suggest that Infosys is undervalued by 31.89% compared to its peers.

Figure 44 - Undervalued/Overvalued to DCF Valuation



Source: Own Estimates

Moving onto the analysis of the comparison to the Discounted Cashflow Valuation (Figure 44), Infosys is fairly valued in all metrics, supporting our initial valuation. The only exceptions are in regard to the EV to Sales ratio, in which Infosys is overvalued by 3.71% when compared to my DCF Valuation, and in regard to Price to Free Cashflow and EV to Invested Capital, both showing an undervaluation of 11.97% and 11.04% respectively.

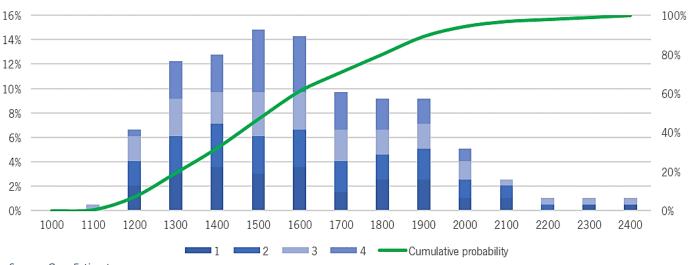
Overall, Infosys has been evaluated as undervalued according to all possible metrics when compared to the current share price. A noteworthy

observation regarding Infosys's relative valuation is that the company performs better compared to its peers on financial metrics "further down the line", from EV/S (or P/S) ratio to EV/EBIT (or P/E) to EV/IC (or P/FCFF). This trend reveals that Infosys is not particularly strong in terms of sales volume, but it has a better ability to transform sales into profits, which is viewed very positively by investors.

## **Sensitivity Analysis**

In this section, I aim to further refine the valuation process by testing the sensitivity of Infosys stock price to the assumptions made thus far. Specifically, I examine the impact of variations in both growth rates, margin levels and discount rates on the final share price. The tests are conducted to provide a more comprehensive analysis of the underlying risk factors inherent in Infosys' operations and market environment. As such, the outcomes of these tests will serve as critical inputs in the formulation of informed investment decisions. The results of these tests are presented in Figure 45, and I note that the distribution of results aligns with theoretical assumptions, following a log normal distribution.

Figure 45 - Probability Distribution of the different Sensitivity Analysis Tests



Source: Own Estimates

In order to assess the sensitivity of Infosys stock price to the underlying assumptions of the valuation process, four tests were conducted. The first test (Figure 46) varied the terminal growth by 5% and the Cost of Capital by 4%, while the second test (Figure 47) varied the EBIT margin by 3% and the Cost of Capital by 4%. In the third test (Figure 48), the defined period Growth in Revenues was varied by 1%, with the Cost of Capital also varying by 4%. Lastly, the fourth test

(Figure 49) assessed the impact of varying the defined period Growth in Revenues by 1% against the terminal growth, which was varied by 5%.

Figure 46 - Test 1 of Sensitivity Analysis

						T	erm	inal Growth						
WACC		4.91%		5.20%		5.49%		5.78%		6.07%		6.35%		6.64%
10.69%	₹	1,778.36	₹	1,854.90	₹	1,939.94	₹	2,034.96	₹	2,141.85	₹	2,262.96	₹	2,401.34
11.18%	₹	1,638.83	₹	1,702.57	₹	1,772.78	₹	1,850.50	₹	1,936.99	₹	2,033.84	₹	2,143.02
11.67%	₹	1,519.42	₹	1,573.18	₹	1,631.97	₹	1,696.53	₹	1,767.74	₹	1,846.70	₹	1,934.74
12.15%	₹	1,416.09	₹	1,461.93	₹	1,511.75	₹	1,566.08	₹	1,625.57	₹	1,690.99	₹	1,763.26
12.64%	₹	1,325.80	₹	1,365.26	₹	1,407.91	₹	1,454.16	₹	1,504.47	₹	1,559.40	₹	1,619.63
13.12%	₹	1,246.23	₹	1,280.49	₹	1,317.33	₹	1,357.08	₹	1,400.08	₹	1,446.75	₹	1,497.57
13.61%	₹	1,175.59	₹	1,205.54	₹	1,237.63	₹	1,272.08	₹	1,309.17	₹	1,349.22	₹	1,392.58

Source: Own Estimates

The sensitivity tests conducted on Infosys' valuation reveal that the Weighted Average Cost of Capital (WACC) has the most significant impact on the stock price, surpassing other variables such as the EBIT margin and revenue growth rates. Specifically, when varying the WACC from the best to the worst-case scenario, the share price sees an upward variation of 29.9% and a downward variation of 18.8% compared to the base case, resulting in a total variation of 48.7%. This impact is more pronounced in scenarios with higher growth rates, in the terminal growth test its peak variation is 57.2%, much more pronounced then when compared to lower growth scenarios that have a maximum variation of 42.6%. It is worth noting that the test on terminal growth is the most affected, followed by the defined period growth and EBIT margin, in that order.

Figure 47 - Test 2 of Sensitivity Analysis

							EB	IT Margin						
WACC		17.76%	, )	18.34%	, )	18.93%	)	19.52%		20.10%	, D	20.69%	)	21.27%
10.69%	5₹	1,870.85	₹	1,925.55	₹	1,980.26	₹	2,034.96	₹	2,089.67	₹	2,144.38	₹	2,199.08
11.18%	,₹	1,701.60	₹	1,751.23	₹	1,800.86	₹	1,850.50	₹	1,900.13	₹	1,949.76	₹	1,999.40
11.67%	,₹	1,560.33	₹	1,605.73	₹	1,651.13	₹	1,696.53	₹	1,741.93	₹	1,787.33	₹	1,832.73
12.15%	₹	1,440.64	₹	1,482.45	₹	1,524.27	₹	1,566.08	₹	1,607.90	₹	1,649.71	₹	1,691.53
12.64%	5₹	1,337.94	₹	1,376.68	₹	1,415.42	₹	1,454.16	₹	1,492.90	₹	1,531.64	₹	1,570.38
13.12%	5₹	1,248.86	₹	1,284.93	₹	1,321.01	₹	1,357.08	₹	1,393.15	₹	1,429.23	₹	1,465.30
13.61%	,₹	1,170.86	₹	1,204.60	₹	1,238.34	₹	1,272.08	₹	1,305.82	₹	1,339.56	₹	1,373.30

Source: Own Estimates

The second variable that presents a significant impact on Infosys' share price is the terminal growth. In particular, it is observed that the variation in this variable, ranging from +15% to -15%, has a notable impact on the stock's final valuation. Specifically, the total fluctuation in regard to the base case amounts to 12.6% upwards and 9.6% downwards, respectively, corresponding to a total variation of 22.2%. Notably, this impact is more pronounced in the "lower WACC" scenarios, where it reaches 30.6%, compared to the "higher WACC" scenarios, where it only reaches 17.1%. Therefore, the sensitivity analysis reveals that the terminal growth variable is a crucial determinant of Infosys' share price.

Figure 48 - Test 3 of Sensitivity Analysis

						Revenue ·	· De	fined period	Gre	owth				
WACC		17.75%	, D	17.94%	, D	18.12%	)	18.30%		18.48%	, D	18.67%	)	18.85%
10.69%	,₹	1,745.82	₹	1,837.53	₹	1,933.85	₹	2,034.96	₹	2,141.07	₹	2,252.37	₹	2,369.06
11.18%	,₹	1,589.53	₹	1,672.31	₹	1,759.25	₹	1,850.50	₹	1,946.23	₹	2,046.64	₹	2,151.89
11.67%	,₹	1,459.04	₹	1,534.39	₹	1,613.51	₹	1,696.53	₹	1,783.62	₹	1,874.94	₹	1,970.65
12.15%	₹	1,348.47	₹	1,417.53	₹	1,490.02	₹	1,566.08	₹	1,645.86	₹	1,729.49	₹	1,817.14
12.64%	,₹	1,253.58	₹	1,317.24	₹	1,384.06	₹	1,454.16	₹	1,527.67	₹	1,604.72	₹	1,685.45
13.12%	,₹	1,171.25	₹	1,230.24	₹	1,292.15	₹	1,357.08	₹	1,425.16	₹	1,496.51	₹	1,571.25
13.61%	,₹	1,099.15	₹	1,154.06	₹	1,211.67	₹	1,272.08	₹	1,335.41	₹	1,401.78	₹	1,471.29

Source: Own Estimates

The defined period growth is the third variable in terms of impact on the share price. The analysis reveals that its variation from the best, +3%, to the worst, -3%, causes a total fluctuation of 29.9% in regard to the base case, with 16% upwards and 13.9% downwards. Notably, the impact is increasingly influential in the "lower WACC" scenarios, where it reaches 30.6%, compared to the "higher WACC" scenarios, where it only reaches 29.3%.

As shown in the sensitivity analysis, the EBIT margin is the least impactful variable on the Infosys stock price. When varying the EBIT margin from the best-case scenario of +9% to the worst-case scenario of -9%, the total fluctuation in regard to the base case is only 8% in both cases, resulting in a total variation of 16%. The impact of the EBIT margin on



the stock price in the different WACC scenarios is almost negligible, as it only varies between 16.1% and 15.9%. This indicates that the EBIT margin has the least effect on the overall stock price compared to the other variables analysed in the sensitivity test.

Figure 49 - Test 4 of Sensitivity Analysis

						Revenue ·	- De	fined period	Gre	owth				
Terminal														
Growth		17.75%	, D	17.94%	·	18.12%	, D	18.30%		18.48%	, D	18.67%	)	18.85%
4.91%	,₹	1,221.53	₹	1,283.29	₹	1,348.10	₹	1,416.09	₹	1,487.37	₹	1,562.08	₹	1,640.36
5.20%	,₹	1,260.33	₹	1,324.32	₹	1,391.48	₹	1,461.93	₹	1,535.81	₹	1,613.25	₹	1,694.39
5.49%	,₹	1,302.49	₹	1,368.90	₹	1,438.61	₹	1,511.75	₹	1,588.45	₹	1,668.85	₹	1,753.10
5.78%	₹	1,348.47	₹	1,417.53	₹	1,490.02	₹	1,566.08	₹	1,645.86	₹	1,729.49	₹	1,817.14
6.07%	,₹	1,398.82	₹	1,470.77	₹	1,546.31	₹	1,625.57	₹	1,708.71	₹	1,795.89	₹	1,887.25
6.35%	,₹	1,454.18	₹	1,529.31	₹	1,608.20	₹	1,690.99	₹	1,777.83	₹	1,868.90	₹	1,964.34
6.64%	,₹	1,515.35	₹	1,594.00	₹	1,676.58	₹	1,763.26	₹	1,854.20	₹	1,949.56	₹	2,049.52

Source: Own Estimates

In regard to the long-term and short-term growth test, the observed impact on the share price across all combinations exhibits less variability than the previously mentioned tests. However, the defined period growth variable still contributes a noticeable impact, with fluctuations ranging between 21.8% in the "lower growth" environment and 22.5% in the "higher growth" scenario. The terminal growth variable exhibits a more significant impact on share price, with fluctuations ranging from 29.6% in the "lower growth" scenario to 30.3% in the "higher growth" scenario.

In conclusion, the sensitivity analysis performed in this study indicates that WACC is the variable with the greatest impact on the share price of Infosys, followed by terminal growth, defined period growth, and EBIT margin. The impact of these variables on the share price is higher in the scenarios with lower WACC and higher growth rates. Although the full spectrum of combinations of long-term and short-term growth rates has lower variability, the impact on the share price remains significant. The lowest recorded price in these tests – 1099.15 – is 16.41% lower than the current share price (1315.0 INR) and 29.82% lower than my base case, while the best-case scenario – 2401.34 – shows a whopping 82.61% increase in share price compared to the current price and a 53.33% increase compared to my base case.

#### **Monte Carlo Simulation**

To conclude Sensitivity Analysis, I performed a Monte Carlo simulation on the share price obtained with the DCF Valuation. This section consists of a comparison with the current share price of 1315.0, and an analysis on the probability of a profitable investment.

Figure 50 - Monte Carlo Simulation on Share

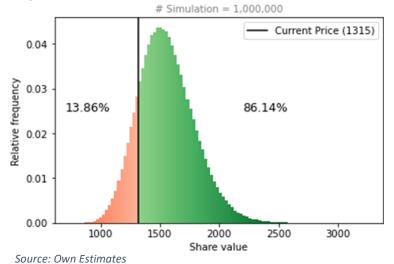


Figure 51 - Monte Carlo Simulation

It simulated 1 million generations of share prices with Python (Figure 50), and for simplicity reasons, the only variable in this analysis is in fact, the share price. With this, I attempt to simulate the random walk in financial markets when considering a potential investment today.

The distribution of Infosys share price, similarly to the plot of the tests in sensitivity analysis, is a log normal distribution, with a Standard Deviation assumed for the analysis of 15% (in line with both historical and industry volatilities). The results of this analysis can also be observed in the Figure 51. This leads to a maximum downside of 46.8% (at the price of 699.2 INR) with 13.86% probability, and a maximum upside of 139.5% (at the price of 3149.9 INR) with 86.14% probability.

Minimum	1st Quartile	2nd Quartile (Median)	Mean	3rd Quartile	M axlmum
699.2	1399.7	1548.5	1566.2	1713.6	3149.9
	Standard Deviation			Variance	
	236.2			55779.7	

Source: Own Estimates



## **Investment Risks**

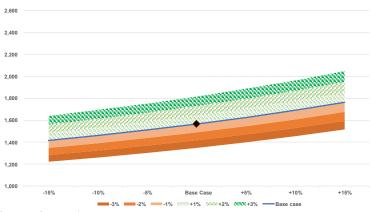
#### **Economic Risks | ER**

#### **Innovation & Competition (ER1)**

#### Probability: LOW | Impact: MODERATE

The IT industry is highly competitive and rapidly evolving, and Infosys faces the risk of falling behind its competitors in terms of technological innovation. Failure to innovate could result in the loss of market share, lower revenues, and reduced profitability. Additionally, Infosys faces intense competition from both established players and new entrants, which could lead to pricing pressure and reduced profitability. These events would lead to a scenario similar to the one explored in test 4 of sensitivity analysis, where

Figure 52 - Test 4 Visualization: Short Term Profitability (categories) & Long Term Profitability (X-axis)



Source: Own Estimates

both the medium and long term profitability are put into question. In Figure 52, the maximum impact of a loss 3% in the medium term growth and 15% in the long term growth is -28.2% on share price (compared to base-case scenario).

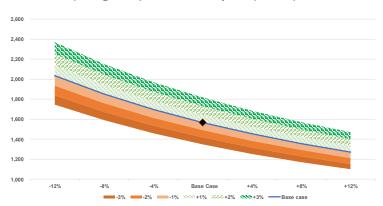
#### **Geopolitical Risk (ER2)**

#### Probability: LOW | Impact: HIGH

As a global IT services provider, Infosys is exposed to geopolitical risk in different ways, including changes in government policies, trade barriers, and security threats.

One significant geopolitical risk for Infosys is the potential impact of **protectionist policies** on its ability to operate in certain markets. For example, restrictions on H1-B visas, which allow highly skilled workers to work in the US, could impact Infosys' ability to provide IT services to US-based clients. Similarly, trade barriers or restrictions could impact the company's ability to move people or services across borders, affecting its revenue and profitability.

Figure 53 - Test 3 Visualization: Short Term Profitability (categories) & Cost of Capital (X-axis)

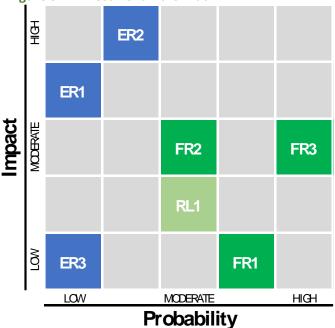


Source: Own Estimates

Another geopolitical risk for Infosys is the potential impact of **security threats**, such as cyber-attacks, on its operations and reputation. As a provider of IT services, Infosys needs to maintain a high level of cybersecurity to protect its clients' data and prevent cyber-attacks. A significant cyber-attack on Infosys could result in loss of data, legal liabilities, and reputational damage.

Finally, geopolitical risks can also arise from **political instability** or conflicts in different countries. Political instability can impact the company's ability to operate in certain markets, as governments may impose restrictions or regulations on foreign companies. Conflicts can also lead to disruptions in the company's supply chain, affecting its ability to deliver services to clients. Such a scenario is observable in test 3 of sensitivity analysis, where both the cost of capital and the medium term profitability are affected. In Figure 53, the maximum impact of a 12% increase in the cost of capital and a loss in 3% profitability is -42.5% on share price (compared to base-case scenario).

Figure 54 - Investment Risks Matrix



Source: Own Estimates

**Taxation Risk (ER3)** 

Probability: LOW | Impact: LOW

One significant taxation risk for Infosys is the impact of changes in tax rates, as changes in tax rates can impact the company's tax liability and affect its profitability. For instance, an increase in corporate tax rates in a particular country could result in higher tax expenses for Infosys, leading to a reduction in its net income.

Another taxation risk for Infosys is the impact of changes in tax policies, which can impact the company's compliance requirements and increase its administrative burden. Changes in tax policies can also impact the company's ability to compete in certain markets, as tax incentives or exemptions may be offered to local companies, giving them a competitive advantage over Infosys.

Finally, taxation risk can also arise from tax disputes or audits, which can result in additional tax liabilities or legal

costs. Tax authorities in different countries may interpret tax laws differently, leading to disagreements on the amount of taxes owed or the applicability of tax incentives or exemptions. In Figure 55, the impact of this risk can be proxied to test 2 of sensitivity analysis, in the loss of operating margin axis, where the maximum impact of a loss of 9% EBIT margin is -8% on share price (compared to base-case scenario).

#### Financial Risks | FR

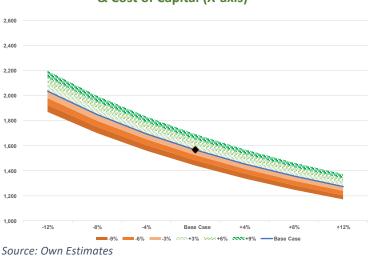
Interest Rate Risk (FR1)

#### Probability: MODERATE | Impact: LOW

One significant interest rate risk for Infosys is the impact of changes in borrowing costs, as the company may need to borrow money to finance its operations or invest in new technologies and capabilities. Changes in interest rates can impact the cost of borrowing, leading to higher or lower interest expenses and affecting the company's profitability.

Another interest rate risk for Infosys is the impact of changes in the cost of capital, which can impact the company's ability to raise funds through equity or debt financing. Changes in interest rates can impact the cost of capital, leading to higher or lower capital costs and affecting the company's ability to invest in growth opportunities or return value to its shareholders.

Figure 55 - Test 2 Visualization: EBIT Margin (categories) & Cost of Capital (X-axis)



Finally, changes in interest rates can also impact the demand for Infosys' services, as companies may reduce their IT spending or delay their investments in times of higher interest rates, leading to a decline in the demand for Infosys' services. This can be observed in both test 1 (Figure 58),2 (Figure 55) and 3 (Figure 53) of sensitivity analysis, in the WACC axis, where the maximum impact of a 12% increase in the cost of capital is -18.8% on share price (compared to basecase scenario).

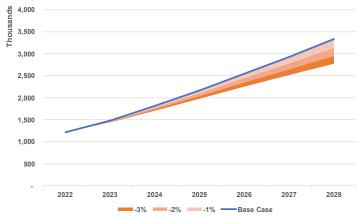
#### Foreign Exchange Risk (FR2)

#### Probability: MODERATE | Impact: MODERATE

Exchange rate risk refers to the potential impact of currency fluctuations on a company's financial performance and operations. Infosys is exposed to exchange rate risk in various ways, including transaction risk and translation risk:

**Transaction risk** refers to the potential impact of currency fluctuations on specific transactions, such as contracts or invoices, which are denominated in a foreign currency. As Infosys operates in multiple countries and generates revenue in different currencies, changes in exchange rates can impact the value of its contracts, leading to gains or losses on the transactions.

Figure 56 - Impact on Revenue of Test 2



Source: Own Estimates

**Translation risk** refers to the potential impact of currency fluctuations on the translation of financial statements from foreign currencies to the reporting currency. As Infosys reports its financial results in Indian Rupees, changes in exchange rates can impact the translation of its financial statements, leading to gains or losses in its reported results.

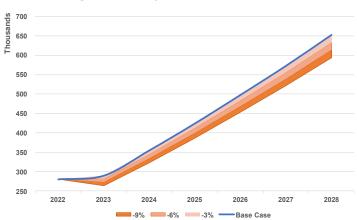
To address these exchange rate risks, Infosys has implemented various measures, such as managing its foreign exchange exposure through hedging strategies and derivatives, optimizing its cost structure to ensure efficiency and competitiveness. The effect of translation risk cannot be expressed in this report, as all currency measures were done in Indian Rupees (INR), as for transaction risk, its effects can be observed in test 3 of sensitivity analysis, in the medium term profitability axis (Figure 57), where the maximum impact of a 3% loss in growth is -13.9% on share price (compared to base-case scenario).

#### Inflation Risk (FR3)

#### Probability: HIGH | Impact: MODERATE

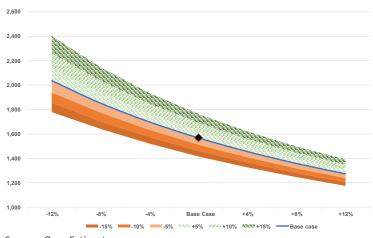
As a global IT services provider, Infosys is exposed to inflation risk in different ways, including increased costs of inputs, higher wage inflation, and pricing pressure from clients. One significant inflation risk for Infosys is the increased **costs of inputs**, such as raw materials, hardware, and software licenses, which lead to higher operating expenses and lower profit margins. Additionally, Infosys needs to manage **wage inflation** in different countries, as wages and salaries may increase due to economic growth, labour shortages, or regulatory changes. Another inflation risk for Infosys is the potential **pricing pressure** from clients, as they may seek to negotiate lower prices to manage their own costs in times of inflation. Additionally, inflation can lead to changes in client preferences and demand, as they

Figure 57 – Impact on EBIT of Test 3 & 4



Source: Own Estimates

Figure 58 - Test 1 Visualization: Long Term Profitability (categories) & Cost of Capital (X-axis)



Source: Own Estimates

may shift their spending towards more essential or high-value services or delay their IT spending altogether. In Figure 53, these impacts can be comparable to test 3 of sensitivity analysis, where both the cost of capital and the medium



term profitability are affected. The maximum impact of a 12% increase in the cost of capital and a loss in 3% profitability is -42.5% on share price (compared to base-case scenario).

#### Regulatory and Legal Risks | RL

Legal Risk (RL1)

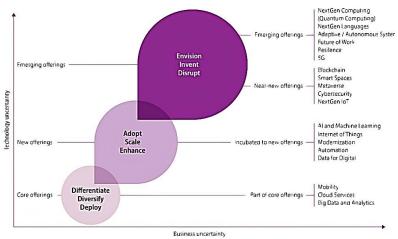
Probability: MODERATE | Impact: LOW

Infosys is subject to a variety of regulations, including data privacy laws, labour laws, tax laws, and other regulations that govern the operation of IT companies. Non-compliance with these regulations can result in fines, legal action, and reputational damage. Moreover, governments around the world are increasingly focused on regulating the technology sector, particularly with regards to data privacy and cybersecurity. Failure to comply with these regulations can result in significant fines and legal liabilities. Infosys has established compliance and governance frameworks to manage regulatory risks. The company has a strong focus on ethics and compliance, with dedicated teams to ensure compliance with regulations in the countries where it operates.

## **Appendixes**

### **Business Description – Appendixes**

Figure 59 - Categorization of IT Services



Source: Own Estimates

The copious amounts of services currently available in the IT industry are in constant shift and evolution. New solutions for new problems are emerging every year, as well as new solutions for old problems. In figure 59, its shown the status quo in terms of services offered in IT, and their current state of development. Most services in Offerings" are widely available in the industry, many of the "Near-new Offerings" are still restricted in some sense (by patents or intellectual property rights), and in "Emerging Offerings" its basically represented the long term future of IT, with services such as 5G and Quantum Computing.

#### **Environmental, Social & Governance – Appendixes**

Figure 60 - Infosys' Board of Directors







Date of appointment	January 10, 2014
Date of reappointment	April 01, 2019
Tenure on Board	8.2 years
Term ending date	March 22, 2023
Shareholding	Nil
Board memberships – India	n listed companies
Infosys Limited	Independent Director
Biocon Limited	Executive Director
Narayana Hrudayalaya Limited	Non-executive and Non-independent Director
Syngene International Limited	Non-executive and Non-independent Director
United Breweries Limited	Independent Director
Committee details as per Re Listing Regulations (1)(2)	gulation 26 of
Member: 1	Chairperson: 1
Areas of expertise	
Financial	Board service & governance
Diversity	Sales & marketing
Global business	Sustainability & ESG
Leadership	Risk management
Mergers & Acquisitions	

9
Aichael Gibbs

Independent Director	
Nationality	American
Age	64
Date of appointment	July 13, 2018
Date of reappointment	July 13, 2021
Tenure on Board	3.7 years
Term ending date	July 12, 2026
Shareholding	Nil
Board memberships – India	an listed companies
Infosys Limited	Independent Director
Committee details as per R Listing Regulations (1)(2)	egulation 26 of
Member: 2	Chairperson: Nil
Areas of expertise	
Financial	Board service & governance
Diversity	Sales & marketing
Global business	Sustainability & ESG
Leadership	Risk management
Information Technology	Mergers & Acquisitions
Cybersecurity	







Uri Levine	
Independent Director	
Nationality	Israeli
Age	57
Date of appointment	April 20, 2020
Tenure on Board	1.9 years
Term ending date	April 19, 2023
Shareholding	Nil
Board memberships – India	an listed companies
Infosys Limited	Independent Director
Committee details as per Ro Listing Regulations (1)(2)	egulation 26 of
Member: Nil	Chairperson: Nil
Areas of expertise	
Diversity	Board service & governance
Global business	Sales & marketing
Leadership	Sustainability & ESG
Information Technology	Risk management
Mergers & Acquisitions	Cybersecurity

Bobby Parikh	
Independent Director	
Nationality	Indian
Age	58
Date of appointment	July 15, 2020
Tenure on Board	1.7 years
Term ending date	July 14, 2023
Shareholding	8,538 shares (0.00%)
Board memberships – Ind	ian listed companies
Infosys Limited	Independent Director
Biocon Limited	Independent Director
Indostar Capital Finance Limited	Independent Director
Committee details as per Listing Regulations (1)(2)	Regulation 26 of
Member: 8	Chairperson: 4

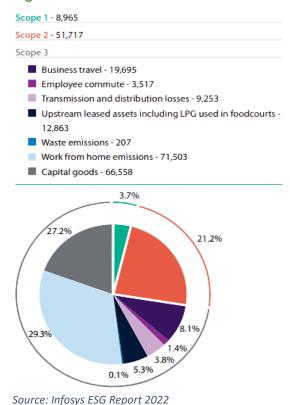
Infosys Limited	Independent Director
Biocon Limited	Independent Director
Indostar Capital Finance Limited	Independent Director
Committee details as per Re Listing Regulations (1)(2)	egulation 26 of
Member: 8	Chairperson: 4
Areas of expertise	
Financial	Board service & governance
Diversity	Sales & marketing
Global business	Sustainability & ESG
Leadership	Risk management
Information Technology	Mergers & Acquisitions



Chitra Nayak	
Independent Director	
Nationality	American
Age	59
Date of appointment	March 25, 2021
Tenure on Board	1 year
Term ending date	March 24, 2024
Shareholding	Nil
Board memberships – India	an listed companies
Infosys Limited	Independent Director
Committee details as per R Listing Regulations (1)(2)	egulation 26 of
Member: 1	Chairperson: Nil
Areas of expertise	
Diversity	Mergers & Acquisitions
Global business	Board service & governance
Leadership	Sustainability & ESG
Information Technology	Risk management
Cybersecurity	Sales & marketing

Source: Infosys Annual Report 2022

Figure 61 - Source of Emissions 2022



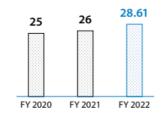
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#### Figure 62 - Evolution of Emissions by scope

#### **Emission intensity**



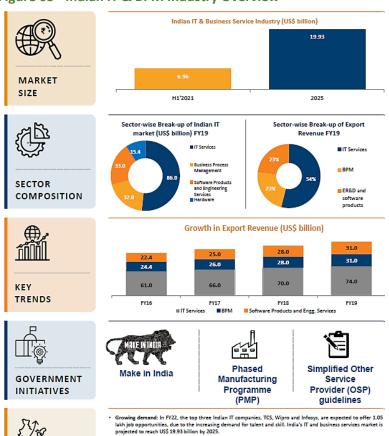
## Million sq. ft. of space certified to the highest standards of green building certification



Source: Infosys Annual Report 2022

#### **Industry Overview – Appendixes**

Figure 63 - Indian IT & BPM Industry Overview



Source: India Equity Brand Foundation

ADVANTAGE

INDIA

Figure 64 - India's Economic Output:

Demand & Supply

YoY (%)	Sep 21	Dec 21	Mar 22	Jun 22	Sep 22	Dec 22
The demand side						
GDP	9.1	5.2	4.0	13.2	6.3	4.4
Consumption	14.2	10.8	4.7	20.0	8.8	2.1
Government spending	11,7	5.8	11.8	1,8	-4.1	-0.8
Gross fixed capital formation	12.4	1.2	4.9	20.6	9.7	8.3
Exports	25.1	27.8	22.4	19.7	12.3	11.3
Imports	26.6	19.7	6.7	33.7	25.9	10.9
The supply side						
GVA	9.3	4.7	3.9	12.1	5.5	4.6
Agriculture	4.8	2.3	4.1	2.5	2.4	3.7
Manufacturing	6.6	1.3	0.6	6.4	-3.6	-1.1
Construction	10.8	0.2	4.9	16.2	5.8	8.4
Services	11.1	7.6	4.9	16.3	9.4	6.2

Source: Government of India; CMIE

As mentioned throughout the report, IT is expected to be one the fastest growing industries, as shown in figure 63. Several government initiatives have facilitated this growth, and in alignment with growing exports and increased market share, it may allow India to further solidify its position in this industry.

When we also take into account that the Services industry is one of the competitive advantages of India, and its resilient structure to economic downturns – as observed in figure 64, where Services display the most consistent YoY change— through remote working and diverse client base (and diverse client industry).

Global Footprint: Indian IT firms have delivery centres all across the world and are well diversified across verticals such as BFSI, telecom and retail.

Policy Support. In the Union Budget 2022-23, the allocation for IT and telecom sector stood at Rs. 88,567.57 crore (USS 11.58 billion).

Competitive Advantages in STAIL Across Competitive Across Competitive Advantages in STAIL Across Competitive Across C

ISS 11.58 billion).
suppetitive Advantage: In FY21, India ranked third worldwide with 608,000 cloud experts across all verticals,
subject the deciding technology. The computer software and hardware sector in India attracted cumulative foreign direct
vestment (FDI) inflows worth US\$ 88.94 billion between April 2000-June 2022.

## **Financial Analysis – Appendixes**

Figure 65 - Revenue by Region Estimation Process

[					India									Europ	<b>e</b>			
	Sales in	Sales	Regression	Real GDP	Inflation	Nominal	Workers	Sales per	Multiplie	Sales in	Sales	Regression	Real GDP	Inflation	Nominal	Workers	Sales per	Multiplie
	Region	growth rate	Coefficient	growth rate	rate	GDP growth	growth rate	Worker growth rate	r	Region	growth rate	Coefficient	growth rate	rate	GDP growth	growth rate	Worker growth rate	r
2011	594	120.82%	0.8992	6.60%	9.50%		14.96%	6.49%	42.89%	5,252	13.36%	0.6826	2.40%	4.20%		14.96%	6.49%	30.62%
2012	740	24.58%	0.8992		10.00%		14.66%	6.49%		6,614	25.93%	0.6826	0.40%			14.66%	6.49%	
2013	833	12.57%	0.8992	6.40%		16.40%	4.46%	6.49%		8.026	21.35%	0.6826	0.50%		2.91%		6.49%	
2014	1.278	53.42%	0.8992	7.40%		13.63%	2.37%	6.49%		9.800	22.10%	0.6826	1.60%		3.63%		6.49%	
2015	1,307	2.27%	0.8992	8.00%	4.90%	13.29%	9.84%	6.49%		10,300	5.10%	0.6826	1.60%	2.90%	4.55%		6.49%	
2016	1,274	-2.52%	0.8992	8.30%	4.50%	13.17%	10.14%	6.49%	32.73%	11,775	14.32%	0.6826	1.80%	1.50%	3.33%	10.14%	6.49%	21.18%
2017	1,798	41.13%	0.8992	6.80%	3.60%	10.64%	3.26%	6.49%	21.66%	13,019	10.56%	0.6826	2.80%	2.20%	5.06%	3.26%	6.49%	15.52%
2018	2,231	24.08%	0.8992	6.50%	3.40%	10.12%	1.87%	6.49%	19.45%	16,738	28.57%	0.6826	2.30%	2.20%	4.55%	1.87%	6.49%	13.41%
2019	2,048	-8.20%	0.8992	3.90%	4.80%	8.89%	11.77%	6.49%	29.59%	19,942	19.14%	0.6826	2.00%	2.00%	4.04%	11.77%	6.49%	23.82%
2020	2,365	15.48%	0.8992	-5.80%	6.20%	0.04%	6.25%	6.49%	13.18%	21,916	9.90%	0.6826	-5.50%	1.10%	-4.46%	6.25%	6.49%	8.09%
2021	2,899	22.58%	0.8992	9.10%	5.50%	15.10%	7.12%	6.49%		24,303	10.89%	0.6826	5.70%	3.50%	9.40%		6.49%	24.79%
2022	3,585	23.66%	0.8992	6.80%	6.70%		20.95%	6.49%		30,129	23.97%	0.6826	2.40%			20.95%	6.49%	
2023	4,823	34.53%	0.8992	5.90%	4.90%		17.00%	6.49%		37,041	22.94%	0.6826	0.60%			17.00%	6.49%	
2024	6,636	37.59%	0.8992	6.30%	4.40%		20.00%	6.49%		45,730	23.46%	0.6826	1.50%			20.00%	6.49%	
2025	8,818	32.87%	0.8992	6.20%	4.10%		16.00%	6.49%		54,906	20.06%	0.6826	2.00%			16.00%	6.49%	
2026	11,427	29.59%	0.8992	6.10%	4.10%		13.00%	6.49%		64,484	17.45%	0.6826	1.90%			13.00%	6.49%	
2027	14,420	26.19%	0.8992	6.00%			10.00%	6.49%		74,108	14.92%	0.6826	1.70%			10.00%		21.87%
2028	17.936	24.38%	0.8992	6.00%		10.24%	8.29%	6.49%	27.12%	84.148	13.55%	0.6826	1.60%		3.94%	8.29%	6.49%	19.85%
	North America					Rest of World												
		0.1			ui Aille		107	0-1			0-1			t of W		107	0-1	
	Sales in	Sales growth	Regression	Real GDP growth	Inflation	Nominal	Workers growth	Sales per Worker	Multiplie	Sales in	Sales growth	Regression	Real GDP growth	Inflation	Orld Nominal GDP growth	Workers growth	Sales per Worker	Multiplie
	Region	growth rate	Coefficient	Real GDP growth rate	Inflation rate	Nominal GDP growth rate	growth rate		1	Region	growth rate	Regression Coefficient	Real GDP growth rate	Inflation rate	Nominal GDP growth rate	growth rate		r'
2011	Region 16,815	growth rate 18.67%	Coefficient 0.6444	Real GDP growth rate 1.90%	Inflation rate	Nominal GDP growth rate 5.06%	growth rate 14.96%	Worker growth rate 6.49%	r 28.61%	Region 2,724	growth rate 31.72%	Coefficient 0.5660	Real GDP growth rate 6.40%	Inflation rate 7.10%	Nominal GDP growth rate 13.95%	growth rate 14.96%	Worker growth rate 6.49%	r 39.50%
2012	Region 16,815 20,346	growth rate 18.67% 21.00%	0.6444 0.6444	Real GDP growth rate 1.90% 2.40%	Inflation rate 3.10% 2.20%	Nominal GDP growth rate 5.06% 4.65%	growth rate 14.96% 14.66%	Worker growth rate 6.49% 6.49%	28.61% 27.77%	2,724 3,554	growth rate 31.72% 30.47%	0.5660 0.5660	Real GDP growth rate 6.40% 5.40%	Inflation rate 7.10% 5.80%	Nominal GDP growth rate 13.95% 11.51%	growth rate 14.96% 14.66%	Worker growth rate 6.49% 6.49%	39.50% 36.15%
2012 2013	Region 16,815 20,346 23,454	growth rate 18.67% 21.00% 15.28%	0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80%	Inflation rate 3.10% 2.20% 1.70%	Nominal GDP growth rate 5.06% 4.65% 3.53%	growth rate 14.96% 14.66% 4.46%	Worker growth rate 6.49% 6.49% 6.49%	28.61% 27.77% 15.17%	2,724 3,554 4,452	growth rate 31.72% 30.47% 25.27%	0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00%	7.10% 5.80% 5.40%	Nominal GDP growth rate 13.95% 11.51% 10.67%	growth rate 14.96% 14.66% 4.46%	Worker growth rate 6.49% 6.49% 6.49%	39.50% 36.15% 23.11%
2012 2013 2014	16,815 20,346 23,454 27,963	growth rate 18.67% 21.00% 15.28% 19.22%	0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40%	Inflation rate 3.10% 2.20% 1.70% 1.90%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35%	growth rate 14.96% 14.66% 4.46% 2.37%	Worker growth rate 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75%	2,724 3,554 4,452 5,300	growth rate 31.72% 30.47% 25.27% 19.05%	0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70%	7.10% 5.80% 5.40% 4.70%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62%	growth rate 14.96% 14.66% 4.46% 2.37%	Worker growth rate 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50%
2012 2013 2014 2015	Region 16,815 20,346 23,454 27,963 30,273	growth rate 18.67% 21.00% 15.28% 19.22% 8.26%	0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60%	3.10% 2.20% 1.70% 1.90% 0.40%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84%	Worker growth rate 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48%	2,724 3,554 4,452 5,300 5,420	growth rate 31.72% 30.47% 25.27% 19.05% 2.26%	0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40%	7.10% 5.80% 5.40% 4.70% 4.80%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84%	Worker growth rate 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97%
2012 2013 2014 2015 2016	16,815 20,346 23,454 27,963 30,273 35,638	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70%	3.10% 2.20% 1.70% 1.90% 0.40% 1.40%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94%	2,724 3,554 4,452 5,300 5,420 5,296	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.40%	7.10% 5.80% 5.40% 4.70% 4.80% 4.40%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83%
2012 2013 2014 2015 2016 2017	Region 16,815 20,346 23,454 27,963 30,273 35,638 38,578	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30%	3.10% 2.20% 1.70% 1.90% 0.40% 1.40% 2.50%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30%	2,724 3,554 4,452 5,300 5,420 5,296 5,894	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.40% 4.70%	7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30%
2012 2013 2014 2015 2016 2017 2018	Region 16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.60% 1.70% 2.30% 2.80%	1.70% 1.90% 0.40% 1.40% 2.50% 2.70%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29% 52.32%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.40% 4.70% 4.70%	7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 4.90%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14%
2012 2013 2014 2015 2016 2017 2018 2019	Region 16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.80% 2.00%	Inflation rate 3.10% 2.20% 1.70% 1.90% 0.40% 1.40% 2.50% 2.70% 2.00%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29% 52.32% 18.59%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 4.70% 3.60%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 4.90% 5.10%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59%
2012 2013 2014 2015 2016 2017 2018 2019 2020	Region 16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 11.53%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.80% -3.40%	Inflation rate  3.10% 2.20% 1.70% 1.90% 0.40% 1.40% 2.50% 2.70% 2.00% 1.40%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703	growth rate 31.72% 30.47% 25.27% 19.05% -2.26% -2.29% 11.29% 52.32% 18.59% 0.53%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 4.70% 6.70% 6.70% 6.70% 6.70% 6.70% 6.70%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 4.90% 5.10% 5.20%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021	Region  16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807 61,640	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 11.53% 10.45%	Coefficient  0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.80% 2.00% -3.40% 5.70%	1.70% 2.20% 1.70% 1.90% 0.40% 2.50% 2.70% 2.00% 1.40% 4.70%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82% 26.23%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703 11,630	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29% 52.32% 18.59% 0.53% 8.66%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 4.70% 6.90%	1nflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 4.90% 5.10% 5.20% 5.90%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88% 29.13%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022	Region 16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807 61,640 75,058	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 11.53% 10.45% 21.77%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.80% -3.40% 5.70% 2.30%	1.70% 1.70% 1.70% 1.90% 0.40% 1.40% 2.50% 2.70% 2.00% 1.40% 4.70% 7.90%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67% 10.38%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12% 20.95%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82% 26.23% 42.17%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703 11,630 12,869	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29% 52.32% 18.59% 0.53% 8.66% 10.65%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.40% 4.70% 4.70% 4.40% 4.70% 4.70% 4.70% 4.70% 4.70% 4.70% 4.70% 4.70% 4.70%	7.10% 5.80% 5.40% 4.70% 4.80% 4.50% 4.90% 5.10% 5.20% 5.90% 9.80%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21% 14.19%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12% 20.95%	6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88% 29.13% 47.08%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023	16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807 61,640 75,058	growth rate 18.67% 21.00% 15.28% 15.28% 17.72% 8.26% 17.72% 10.36% 17.53% 11.53% 10.45% 21.77% 20.88%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 1.70% 2.30% 2.80% 2.00% -3.40% 5.70% 2.30% 1.60%	Inflation rate 3.10% 2.20% 1.70% 1.90% 0.40% 1.40% 2.50% 2.70% 2.00% 1.40% 4.70% 7.90% 4.60%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67% 10.38% 6.27%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12% 20.95%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82% 26.23% 42.17% 32.41%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703 11,630 12,869	growth rate 31.72% 30.47% 25.27% 19.05% -2.26% -2.29% 11.29% 52.32% 18.59% 0.53% 8.66% 10.65% 22.97%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 4.70% 3.60% 6.90% 4.00% 3.90%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 5.10% 5.20% 5.90% 9.80%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21% 14.19%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12% 20.95% 17.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88% 29.13% 47.08%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,573 50,038 55,807 61,640 75,058 90,731 109,686	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 11.53% 21.77% 20.88% 20.89%	0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.80% 2.000% -3.40% 2.30% 1.60% 1.10%	Inflation rate 3.10% 2.20% 1.70% 1.90% 0.40% 1.40% 2.50% 2.70% 2.00% 1.40% 4.70% 7.90% 4.60% 2.50%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67% 10.38% 6.27% 3.63%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12% 20.95% 17.00% 20.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82% 42.17% 32.41% 32.42%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703 11,630 12,869 15,825 19,569	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% 2.29% 11.29% 52.32% 18.59% 0.53% 8.66% 10.65% 22.97% 23.66%	Coefficient  0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 4.70% 3.60% -1.80% 4.00% 4.90% 4.20%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.50% 4.90% 5.10% 5.20% 5.90% 9.80% 8.60% 6.50%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21% 14.19% 12.84% 10.97%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12% 20.95% 17.00% 20.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 47.08% 40.58% 41.81%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025	16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807 61,640 75,058 90,731 109,686 129,840	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 10.45% 20.88% 20.89% 18.37%	Coefficient  0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.00% -3.40% 5.70% 2.30% 1.60% 1.10% 1.80%	Inflation rate  3.10% 2.20% 1.70% 1.90% 0.40% 2.50% 2.70% 2.00% 1.40% 4.70% 7.90% 4.60% 2.50% 2.20%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67% 10.38% 6.27% 3.63% 4.04%	growth rate 14.96% 14.96% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12% 20.95% 17.00% 20.00% 16.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82% 26.23% 42.17% 32.41% 32.42% 28.51%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703 11,630 12,869 15,825 19,569 23,461	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29% 52.32% 18.59% 0.53% 8.66% 10.65% 22.97% 23.66% 19.89%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 3.60% -1.80% 4.00% 4.20% 4.00%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 5.10% 5.20%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21% 14.19% 12.84% 10.97% 9.41%	growth rate 14.96% 4.46% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12% 20.95% 17.00% 20.00% 16.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88% 47.08% 40.58% 41.81% 35.15%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024	16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807 61,640 75,058 109,686 129,840 151,019	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 10.45% 20.88% 20.89% 18.37% 16.31%	Coefficient  0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.00% -3.40% 5.70% 2.30% 1.10% 1.80% 2.00% 2.00%	Inflation rate  3.10% 2.20% 1.70% 1.90% 0.40% 2.50% 2.00% 1.40% 4.70% 4.70% 4.60% 2.50% 2.20% 2.10%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67% 10.38% 6.27% 3.63% 4.04% 4.14%	growth rate 14.96% 4.46% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12% 20.95% 17.00% 20.00% 13.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.94% 20.94% 14.52% 23.82% 10.82% 26.23% 42.17% 32.41% 32.42% 28.51% 25.31%	2,724 3,554 4,452 5,300 5,420 5,894 8,978 10,647 10,703 11,869 15,825 19,569 23,461 27,581	growth rate 31.72% 30.47% 30.47% 19.05% 2.26% -2.29% 11.29% 52.32% 18.59% 0.53% 8.66% 10.65% 22.97% 23.66% 19.89% 17.56%	Coefficient  0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 3.60% -1.80% 6.90% 4.00% 4.00% 4.00% 4.00%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.40% 4.50% 5.10% 5.20% 6.50% 5.20% 4.70%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21% 14.19% 12.84% 10.97% 9.41% 8.89%	growth rate 14.96% 4.46% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 11.77% 6.25% 7.12% 20.95% 17.00% 20.00% 13.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88% 29.13% 47.08% 40.58% 35.15% 31.02%
2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027	16,815 20,346 23,454 27,963 30,273 35,638 38,578 42,575 50,038 55,807 61,640 75,058 90,731 109,686 129,840	growth rate 18.67% 21.00% 15.28% 19.22% 8.26% 17.72% 8.25% 10.36% 17.53% 10.45% 20.88% 20.89% 18.37%	Coefficient  0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444 0.6444	Real GDP growth rate 1.90% 2.40% 1.80% 2.40% 2.60% 1.70% 2.30% 2.00% -3.40% 5.70% 2.30% 1.60% 1.10% 1.80%	Inflation rate  3.10% 2.20% 1.70% 1.90% 0.40% 1.40% 2.50% 4.70% 2.00% 1.40% 4.70% 7.90% 4.60% 2.50% 2.20% 2.10% 2.10%	Nominal GDP growth rate 5.06% 4.65% 3.53% 4.35% 3.01% 3.12% 4.86% 5.58% 4.04% -2.05% 10.67% 10.38% 6.27% 3.63% 4.04% 4.14%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12% 20.95% 17.00% 16.00% 13.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	28.61% 27.77% 15.17% 13.75% 20.48% 20.94% 15.30% 14.52% 23.82% 10.82% 26.23% 42.17% 32.41% 28.51% 25.31%	2,724 3,554 4,452 5,300 5,420 5,296 5,894 8,978 10,647 10,703 11,630 12,869 15,825 19,569 23,461	growth rate 31.72% 30.47% 25.27% 19.05% 2.26% -2.29% 11.29% 52.32% 18.59% 0.53% 8.66% 10.65% 22.97% 23.66% 19.89%	0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660 0.5660	Real GDP growth rate 6.40% 5.40% 5.00% 4.70% 4.40% 4.70% 3.60% -1.80% 4.00% 4.20% 4.00%	Inflation rate 7.10% 5.80% 5.40% 4.70% 4.80% 4.50% 4.50% 5.10% 5.20% 5.90% 9.80% 6.50% 5.20% 4.70% 4.60%	Nominal GDP growth rate 13.95% 11.51% 10.67% 9.62% 9.41% 8.99% 9.41% 9.83% 8.88% 3.31% 13.21% 14.19% 12.84% 10.97% 9.41% 8.89%	growth rate 14.96% 14.66% 4.46% 2.37% 9.84% 10.14% 3.26% 1.87% 6.25% 7.12% 20.95% 20.95% 17.00% 16.00% 13.00%	Worker growth rate 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49% 6.49%	39.50% 36.15% 23.11% 19.50% 27.97% 27.83% 20.30% 19.14% 29.59% 16.88% 29.13% 47.08% 40.58% 35.15% 31.02%

Source: Infosys Annual Reports, IMF & Own Estimates

Figure 66 - Income Statement

in Million INR	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Revenue	705,220	826,750	907,910	1,004,720	1,216,410	1,484,196	1,816,206	2,170,242	2,545,103	2,927,855	3,334,380 a)
Cost of Revenue	451,300	538,670	607,320	654,130	819,980	1,037,453	1,269,528	1,516,999	1,779,027	2,046,570	2,330,732 b)
Gross Profit	253,920	288,080	300,590	350,590	396,430	446,743	546,678	653,243	766,076	881,284	1,003,648
Gross Profit Margin (%)	36.0%	34.8%	33.1%	34.9%	32.6%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%
Selling/General/Admin. Expenses, Total	81,730	96,800	105,130	102,470	114,580	155,389	190,149	227,215	266,461	306,534	349,096
Selling/General/Administrative Expense	36,370	43,660	45,720	37,900	44,130	61,524	75,287	89,963	105,502	121,368	138,219 c1)
Labor & Related Expense	42,320	48,250	54,180	61,030	64,980	86,739	106,142	126,833	148,740	171,109	194,867 c2)
Advertising Expense	3,040	4,890	5,230	3,540	5,470	7,126	8,720	10,420	12,220	14,057	16,009 c2)
Unusual Expense (Income)	1,890	9,690	1,720	1,900	1,700	1,700	1,700	1,700	1,700	1,700	1,700 constant
Operating Profit	170,300	181,590	193,740	246,220	280,150	289,654	354,829	424,328	497,914	573,050	652,853
Operating Profit Margin (%)	24.15%	21.96%	21.34%	24.51%	23.03%	19.52%	19.54%	19.55%	19.56%	19.57%	19.58%
Interest Expense - Non-Operating	-		1,700 -	1,760 -	1,750 -	1,925 -	2,118 -	2,329 -	2,562 -	2,818 -	3,100 d)
Interest/Invest Income - Non-Operating	27,760	25,400	23,490	19,620	20,720	23,398	23,398	23,398	23,398	23,398	23,398 e1)
Other Non-Operating Income (Expense)	4,640	3,420	4,540	2,200	1,980	2,907	2,907	2,907	2,907	2,907	2,907 e2)
Net Income Before Taxes	202,700	210,410	220,070	266,280	301,100	314,034	379,016	448,303	521,657	596,536	676,057
Provision for Income Taxes	42,410	56,310	53,680	72,050	79,640	83,061	100,249	118,575	137,977	157,782	178,815
Minority Interest, Supplemental	-	60	450	720	360	622	751	888	1,034	1,182	1,340 e2)
Net Income	160,290	154,040	165,940	193,510	221,100	230,350	278,017	328,840	382,647	437,572	495,903
Gross Dividends - Common Stock	79,490	91,480	81,210	115,030	130,390	136,524	164,775	194,897	226,788	259,341	293,912
Amort of Intangibles, Supplemental	2,290	2,290	2,950	4,660	4,620	4,829	5,258	5,699	6,156	6,627	7,122 f)
Depreciation, Supplemental	16,340	17,820	25,980	28,010	30,140	31,501	34,303	37,179	40,163	43,231	46,465 f)
Depreciation of Right-of-Use Assets, Sup.	-	-	5,630	6,350	7,810	9,371	11,467	13,703	16,070	18,486	21,053 c1)
EBITDA	188,930	201,700	222,670	278,890	314,910	325,984	394,390	467,206	544,233	622,908	706,440

Source: Infosys Annual Reports & Own Estimates

Figure 67 - Balance Sheet

in Million INR	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
ASSETS											
Cash and Short Term Investments	256,920	258,370	229,080	265,520	239,450	259,234	242,966	243,176	260,393	298,216	352,843
Cash & Equivalents	126,350	138,390	118,920	195,650	134,710	154,494	138,226	138,436	155,653	193,476	248,103 g)
Short Term Investments	130,570	119,980	110,160	69,870	104,740	104,740	104,740	104,740	104,740	104,740	104,740 constant
Total Receivables, Net	194,400	232,620	279,190	296,970	372,530	408,439	499,806	597,233	700,392	805,722	917,595 h1)
Prepaid Expenses	21,480	28,030	29,700	33,880	21,890	50,725	62,056	74,138	86,932	99,994	113,868 i)
Other Current Assets, Total	27,370	9,760	7,790	10,960	37,980	37,980	37,980	37,980	37,980	37,980	37,980 constant
Total Current Assets	500,170	528,780	545,760	607,330	671,850	756,378	842,808	952,528	1,085,697	1,241,912	1,422,286
Property/Plant/Equipment, Total - Gross	222,060	247,680	310,730	335,080	346,140	373,289	402,688	434,523	468,995	506,324	546,745
Buildings	81,300	89,260	100,160	105,650	124,580	134,902	146,080	158,183	171,289	185,482	200,850 j)
Land/Improvements	19,000	19,100	13,160	13,970	14,310	14,310	14,310	14,310	14,310	14,310	14,310 constant
Machinery/Equipment	82,880	98,350	114,220	126,460	117,810	127,571	138,141	149,587	161,981	175,402	189,935 j)
Construction in Progress	20,270	18,770	12,640	10,630	4,160	4,160	4,160	4,160	4,160	4,160	4,160 constant
Other PPE	18,610	22,200	70,550	78,370	85,280	92,346	99,997	108,283	117,254	126,970	137,490 j)
Property/Plant/Equipment, Total - Net	121,430	133,560	178,670	184,170	183,140	196,004	209,247	220,997	231,691	241,445	250,612
Goodwill, Net	22,110	35,400	52,860	60,790	61,950	61,950	61,950	61,950	61,950	61,950	61,950 constant
Accumulated Depreciation, Total	- 100,630 -	114,120 -	132,060 -	150,910		177,285		213,526 -	237,304	264,878 -	296,133
Intangibles, Net	2,470	6,910	19,000	20,720	17,070	17,070	17,070	17,070	17,070	17,070	17,070 constant
Long Term Investments	57,560	46,340	41,370	118,630	138,280	152,108	167,319	184,051	202,456	222,701	244,971 k)
Note Receivable - Long Term	75,340	73,200	62,320	71,910	81,160	75,740	92,683	110,750	129,879	149,411	170,157 I)
Other Long Term Assets, Total	19,820	23,190	27,700	20,310	25,400	27,025	28,754	30,594	32,551	34,633	36,849 m)
Total Non-Current Assets	298,730	318,600	381,920	476,530	507,000	529,897	577,023	625,411	675,598	727,212	781,609
Total Assets	798,900	847,380	927,680	1,083,860	1,178,850	1,286,275	1,419,831	1,577,939	1,761,294	1,969,124	2,203,896
LIABILITIES											
Accounts Payable											
-	6,940	16,550	28,520	26,450	41,340	41,531	50,821	60,727	71,217	81,927	93,302 h2)
Payable/Accrued	-		-	-	-		-	-	-		-
Payable/Accrued Accrued Expenses	63,820	75,120	87,140	105,140	137,190	153,595	187,905	224,491	263,230	302,783	344,794 i)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases	63,820	75,120	87,140 6,190	105,140 7,380	137,190 8,720	153,595 9,592	187,905 10,551	224,491 11,606	263,230 12,767	302,783 14,044	344,794 i) 15,448 k)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total	63,820 - 70,290	75,120 - 94,710	87,140 6,190 86,710	105,140 7,380 99,680	137,190 8,720 148,780	153,595 9,592 162,358	187,905 10,551 177,175	224,491 11,606 193,344	263,230 12,767 210,989	302,783 14,044 230,244	344,794 i) 15,448 k) 251,256 m)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities	63,820 - 70,290 141,050	75,120 - 94,710 186,380	87,140 6,190 86,710 208,560	105,140 7,380 99,680 238,650	137,190 8,720 148,780 336,030	153,595 9,592 162,358 367,101	187,905 10,551 177,175 426,477	224,491 11,606 193,344 490,194	263,230 12,767 210,989 558,227	302,783 14,044 230,244 629,022	344,794 i) 15,448 k) 251,256 m) 704,825
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt	63,820 - 70,290 141,050	75,120 - 94,710 186,380	87,140 6,190 86,710 208,560 40,140	105,140 7,380 99,680 238,650 45,870	137,190 8,720 148,780 336,030 46,020	153,595 9,592 162,358 367,101 50,622	187,905 10,551 177,175 426,477 55,684	224,491 11,606 193,344 490,194 61,253	263,230 12,767 210,989 558,227 67,378	302,783 14,044 230,244 629,022 74,116	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current Liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax	70,290 141,050 5,410	75,120 - 94,710 186,380 - 6,720	87,140 6,190 86,710 208,560 40,140 9,680	105,140 7,380 99,680 238,650 45,870 8,750	137,190 8,720 148,780 336,030 46,020 11,560	153,595 9,592 162,358 367,101 50,622 11,560	187,905 10,551 177,175 426,477 55,684 11,560	224,491 11,606 193,344 490,194 61,253 11,560	263,230 12,767 210,989 558,227 67,378 11,560	302,783 14,044 230,244 629,022 74,116 11,560	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current Liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest	63,820 - 70,290 141,050 - 5,410	75,120 - 94,710 186,380 - 6,720 580	87,140 6,190 86,710 208,560 40,140 9,680 3,940	105,140 7,380 99,680 238,650 45,870 8,750 4,310	137,190 8,720 148,780 336,030 46,020 11,560 3,860	153,595 9,592 162,358 367,101 50,622 11,560 4,226	187,905 10,551 177,175 426,477 55,684 11,560 4,578	224,491 11,606 193,344 490,194 61,253 11,560 5,031	263,230 12,767 210,989 558,227 67,378 11,560 5,587	302,783 14,044 230,244 629,022 74,116 11,560 6,251	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total	70,290 141,050 - 5,410 10 3,200	75,120 - 94,710 186,380 - 6,720 580 4,220	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities	63,820 - 70,290 141,050 - 5,410 10 3,200 8,620	75,120 - 94,710 186,380 - 6,720 580 4,220 11,520	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities	70,290 141,050 - 5,410 10 3,200	75,120 - 94,710 186,380 - 6,720 580 4,220	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities SHAREHOLDER'S EQUITY	63,820 -70,290 141,050 - 5,410 10 3,200 8,620 149,670	75,120 94,710 186,380 6,720 580 4,220 11,520 197,900	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620 <b>273,180</b>	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700 320,350	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320 <b>425,350</b>	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288 <b>461,389</b>	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702 <b>526,179</b>	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723 <b>595,917</b>	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405 <b>670,632</b>	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807 <b>748,829</b>	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991 832,816
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities SHAREHOLDER'S EQUITY Common Stock	63,820 - 70,290 141,050 - 5,410 10 3,200 8,620 149,670	75,120 94,710 186,380 - 6,720 580 4,220 11,520 197,900	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620 273,180	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700 320,350	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320 425,350	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288 461,389	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702 <b>526,179</b>	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723 595,917	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405 <b>670,632</b>	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807 <b>748,829</b>	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991 832,816 20,980 constant
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities SHAREHOLDER'S EQUITY Common Stock Additional Paid-in Capital	63,820 70,290 141,050 5,410 10 3,200 8,620 149,670 10,880 1,860	75,120 94,710 186,380 6,720 580 4,220 11,520 197,900 21,700 3,960	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620 273,180	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700 320,350 21,240 9,930	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320 <b>425,350</b>	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288 <b>461,389</b>	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702 <b>526,179</b> 20,980 2,000	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723 <b>595,917</b> 20,980 2,000	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405 <b>670,632</b>	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807 <b>748,829</b>	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991 832,816  20,980 constant 2,000 constant
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities SHAREHOLDER'S EQUITY Common Stock Additional Paid-In Capital Retained Earnings (Accumulated Deficit)	63,820 -70,290 141,050 -5,410 10 3,200 8,620 149,670	75,120 94,710 186,380 6,720 580 4,220 11,520 197,900 21,700 3,960 614,790	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620 273,180 21,220 6,000 616,870	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700 320,350 21,240 9,930 718,930	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320 <b>425,350</b> 20,980 2,000 717,820	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288 461,389 20,980 2,000 788,675	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702 <b>526,179</b> 20,980 2,000 854,702	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723 <b>595,917</b> 20,980 2,000 940,152	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405 <b>670,632</b> 20,980 2,000 1,045,703	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807 <b>748,829</b> 20,980 2,000 1,172,181	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991 832,816  20,980 constant 2,000 constant 1,319,615 o)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities SHAREHOLDER'S EQUITY Common Stock Additional Paid-In Capital Retained Earnings (Accumulated Deficit) Other Equity, Total	63,820 70,290 141,050 - 5,410 10 3,200 8,620 149,670 10,880 1,860 628,800 7,690	75,120 94,710 186,380 - 6,720 580 4,220 11,520 197,900 21,700 3,960 614,790 9,030	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620 273,180 21,220 6,000 616,870 10,410	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700 320,350 21,240 9,930 718,930 13,410	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320 <b>425,350</b> 20,980 2,000 717,820 12,700	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288 <b>461,389</b> 20,980 2,000 788,675 13,231	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702 <b>526,179</b> 20,980 2,000 854,702 15,969	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723 <b>595,917</b> 20,980 2,000 940,152 18,889	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405 <b>670,632</b> 20,980 2,000 1,045,703 21,979	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807 <b>748,829</b> 20,980 2,000 1,172,181 25,134	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991 832,816  20,980 constant 2,000 constant 1,319,615 o) 28,485 p)
Payable/Accrued Accrued Expenses Current Port. of LT Debt/Capital Leases Other Current liabilities, Total Total Current Liabilities Total Long Term Debt Deferred Income Tax Minority Interest Other Liabilities, Total Total Non-Current Liabilities Total Liabilities SHAREHOLDER'S EQUITY Common Stock Additional Paid-In Capital Retained Earnings (Accumulated Deficit)	63,820 -70,290 141,050 -5,410 10 3,200 8,620 149,670	75,120 94,710 186,380 6,720 580 4,220 11,520 197,900 21,700 3,960 614,790	87,140 6,190 86,710 208,560 40,140 9,680 3,940 10,860 64,620 273,180 21,220 6,000 616,870	105,140 7,380 99,680 238,650 45,870 8,750 4,310 22,770 81,700 320,350 21,240 9,930 718,930	137,190 8,720 148,780 336,030 46,020 11,560 3,860 27,880 89,320 <b>425,350</b> 20,980 2,000 717,820	153,595 9,592 162,358 367,101 50,622 11,560 4,226 27,880 94,288 461,389 20,980 2,000 788,675	187,905 10,551 177,175 426,477 55,684 11,560 4,578 27,880 99,702 <b>526,179</b> 20,980 2,000 854,702	224,491 11,606 193,344 490,194 61,253 11,560 5,031 27,880 105,723 <b>595,917</b> 20,980 2,000 940,152	263,230 12,767 210,989 558,227 67,378 11,560 5,587 27,880 112,405 <b>670,632</b> 20,980 2,000 1,045,703	302,783 14,044 230,244 629,022 74,116 11,560 6,251 27,880 119,807 <b>748,829</b> 20,980 2,000 1,172,181	344,794 i) 15,448 k) 251,256 m) 704,825 81,527 k) 11,560 constant 7,024 n) 27,880 constant 127,991 832,816  20,980 constant 2,000 constant 1,319,615 o)

Source: Infosys Annual Reports & Own Estimates

#### Figure 68 - Assumptions for Financial Analysis

#### **Income Statement:**

- a) Estimation explained in detail in Financial Analysis;
- **b)** Estimated with the fixed Gross Profit Margin estimates for 2023, assumed as constant for the defined growth period, at 30.1%, from 2023 to 2028;
- c) Assumed as a fixed percentage of Revenues: c1) average of the last 5 years, c2) average of the last 3 years;
- **d)** Using the same growth rate as Borrowings and Leases Total Debt;
- e) Constant value calculated as: e1) the average of the last 5 years, e2) the average of the last 3 years (due to IFRS implications);
- f) Using the same growth rate as Non-Current Assets;

#### **Balance Sheet:**

- g) Used as a balancing item, estimated as the reconciliating factor between Assets and Liabilities calculated as total Liabilities minus all other Asset lines;
- h) Estimated using the turnover ratio: h1) the Receivables turnover ratio, calculated as the average turnover of the last 5 years, h2) the Payables turnover ratio, calculated as the average of the last 3 years;
- i) Estimated as a fixed percentage of total operating expenses;
- j) Estimation process using growth in total workers, as in Revenues (more details in Financial Analysis);
- k) Using an arbitrarily defined growth rate of 10%, in order to keep up with other assumptions evolution;
- I) Assumed as a fixed percentage of total Receivables;
- m) Estimated using the compound annual growth rate (CAGR) of the last 5 years;
- n) Assumed as a fixed percentage of total Equity;
- **o)** Calculated as: last year value, added the Retained earnings of the current year (payout ratio for defined growth period assumed as 2022 value of 58.97%) and subtracted the absolute growth in Non-Current Assets;
- **p)** Using the same growth rate as Net Income.

## **Main References**

- McKinsey & Company. (2023, January). 2023: A testing year—Will the macro scenario range widen or narrow? McKinsey & Company. https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/2023-a-testing-year-will-the-macro-scenario-range-widen-or-narrow
- Deloitte. (2023, April). *India Economic Outlook*. Deloitte. https://www2.deloitte.com/us/en/insights/economy/asia-pacific/india-economic-outlook.html
- EY. (2023, April). *EY European Economic Outlook: April 2023*. EY. https://www.ey.com/en\_pl/economic-analysis-team/ey-european-economic-outlook-april-2023
- International Monetary Fund. (2023, April). World Economic Outlook: A Rocky Recovery. IMF. https://www.imf.org/-/media/Files/Publications/WEO/2023/April/English/text.ashx