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# ANALYSIS OF PER CAPITA INCOME IN TEN DEVELOPED COUNTRIES

## Per Capita Income

Per capita income measures the average income of individuals in a country. It is calculated by dividing the total income (GDP) of a country by its population. The formula for calculating per capita income is:

**Per Capita Income = Total Income (GDP) / Population**

This indicator is helpful to understand the economic well-being of a country's population. By comparing per capita income, we can assess living standards and economic growth trends across nations. We will analyze the per capita income of selected countries, compare them with Pakistan and the global average GDP (World GDP PPP), and highlight the differences in percentage.

This number helps us understand how wealthy or well-off the people in a country are. By looking at per capita income, we can compare how well people live in different countries. It also shows us what factors make the income go up or down, like jobs, industries, and government policies.

## Countries Analyzed:

* United States
* Australia
* New Zealand
* Canada
* England
* Ireland
* Turkey
* Germany
* Japan
* Italy

### **Country Analysis**

#### **United States**

**GDP Per Capita (USD):** $76,399

**Trend:** Increasing

**Why?** The U.S. economy is strong because of its large technology companies (like Google and Apple) and financial services. These industries create many jobs and help grow the economy.

#### **Australia**

**GDP Per Capita (USD):** $62,625

**Trend:** Increasing

**Why?** Australia’s economy is growing because of its strong exports of natural resources, like coal and iron. Many people are also employed, which helps boost income.

#### **New Zealand**

**GDP Per Capita (USD):** $51,967

**Trend:** Increasing

**Why?** New Zealand’s economy benefits from farming and agriculture exports, like dairy and meat. Tourism is also a big part of their economy.

#### **Canada**

**GDP Per Capita (USD):** $58,400

**Trend:** Increasing

**Why?** Canada’s wealth comes from its natural resources, like oil and timber, as well as industries like manufacturing and technology. Healthcare and education also support a high quality of life.

#### **England**

**GDP Per Capita (USD):** $54,603

**Trend:** Stable

**Why?** England’s economy is strong due to its financial services in London. However, challenges like Brexit have slowed growth.

#### **Ireland**

**GDP Per Capita (USD):** $126,905

**Trend:** Increasing

**Why?** Ireland attracts many big companies like Google and Facebook because of its low corporate taxes. These companies create jobs and increase income.

#### **Turkey**

**GDP Per Capita (USD):** $37,274

**Trend:** Decreasing

**Why?** Turkey faces challenges like inflation (prices going up) and political instability. This makes it harder for the economy to grow.

#### **Germany**

**GDP Per Capita (USD):** $63,150

**Trend:** Stable

**Why?** Germany is known for its car manufacturing (like BMW and Volkswagen) and strong industries. However, high energy costs and a slowing economy are challenges.

#### **Japan**

**GDP Per Capita (USD):** $45,573

**Trend:** Decreasing

**Why?** Japan is a leader in technology and car manufacturing (like Toyota). However, its aging population and slowing growth are affecting its economy.

#### **Italy**

**GDP Per Capita (USD):** $51,865

**Trend:** Stable

**Why?** Italy’s economy relies on tourism, fashion, and food industries. However, high debt and unemployment slow down growth.

## Comparison table of Each County with World GDP and Pakistan’s GDP (%)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Index | Country Name | GDP per Capta  (USD) | World GDP PPP  ($20,645) | Pakistan  ($6,437) | Trend |
| 1 | USA | 76,399 | +270% | +1,086% | Increasing |
| 2 | Australia | 62,625 | +203% | +873% | Increasing |
| 3 | New Zealand | 51,967 | +152% | +708% | Increasing |
| 4 | Canada | 58,400 | +183% | +807% | Increasing |
| 5 | England | 54,603 | +164% | +748% | Increasing |
| 6 | Ireland | 126,905 | +515% | +1,872% | Increasing |
| 7 | Turkey | 37,274 | +81% | +479% | Stable |
| 8 | Germany | 63,150 | +206% | +881% | Increasing |
| 9 | Japan | 45,573 | +121% | +608% | Stable |
| 10 | Italy | 51,865 | +151% | +706% | Stable |

Table 1.1: Summary of 10 Selected Developed Countries with Global GDP and Pakistan GDP for the Year 2022

Note: Values are taken from website (worldometers.info). Values may vary on different sites

### Comparative Analysis with Key Factors Affecting Trends

#### **1. United States:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** The United States boasts a highly diversified economy, with significant contributions from technology, finance, healthcare, and manufacturing sectors. This diversification ensures resilience against global economic shocks and inter-sectoral support.
* **Policy and Innovation:** The government’s emphasis on fostering innovation through tax breaks for R&D and strong intellectual property laws bolsters technological growth. Entrepreneurial initiatives such as the Small Business Administration (SBA) encourage new ventures.
* **Global Economic Impact:** The US dollar’s status as a global reserve currency strengthens its trade and investment opportunities worldwide. Agreements like the USMCA enhance economic activity.
* **Technology:** As a global tech hub, Silicon Valley’s contributions include advancements in AI, machine learning, and software development. Companies such as Google, Apple, and OpenAI lead innovation globally.

**Contribution to GDP:** Technology and finance collectively contribute over 30% to the GDP, with the tech sector generating over $4 trillion annually.

#### **2. Australia:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Australia’s economy leans on mining, agriculture, and services, with exports like coal and iron ore forming a crucial part of GDP.
* **Policy and Innovation:** Immigration policies attract skilled workers, and startup-friendly initiatives bolster industries like renewable energy and tech-based agriculture.
* **Global Economic Impact:** Australia’s trade ties with China and Asia contribute significantly to economic stability, supported by export-oriented policies.
* **Technology:** The adoption of AI in mining and precision agriculture reflects its tech growth, enhancing industry efficiency.

**Contribution to GDP:** Mining and tech sectors account for 15% of GDP collectively.

#### **3. New Zealand:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Agriculture, especially dairy exports, remains central to the economy, complemented by a thriving tourism sector.
* **Policy and Innovation:** Focused initiatives on sustainable agriculture and eco-tourism attract global investors and tourists.
* **Global Economic Impact:** Free trade agreements, particularly with China, position New Zealand favorably in global supply chains.
* **Technology:** Precision agriculture and AI-driven farming enhance efficiency in agriculture, boosting exports.

**Contribution to GDP:** Agriculture contributes 6.6%, with technology aiding in productivity.

#### **4. Canada:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Canada balances natural resources, manufacturing, and services, with energy exports as a vital driver.
* **Policy and Innovation:** Green energy initiatives and digital transformation programs underscore Canada’s commitment to innovation.
* **Global Economic Impact:** NAFTA/USMCA trade agreements foster strong ties with the US and Mexico, bolstering economic growth.
* **Technology:** Emerging tech hubs like Toronto’s AI ecosystem showcase Canada’s innovation potential.

**Contribution to GDP:** The energy sector contributes 10%, while the tech industry’s share is rising at 7% annually.

#### **5. England (United Kingdom):**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Finance, healthcare, technology, and creative industries ensure a balanced economic structure. London’s financial hub remains pivotal globally.
* **Policy and Innovation:** Fintech advancements and AI research initiatives drive growth. Post-Brexit trade negotiations redefine the country’s economic strategy.
* **Global Economic Impact:** Despite Brexit challenges, strong trade partnerships sustain financial services exports.
* **Technology:** AI breakthroughs from institutions like DeepMind and fintech startups position England as a tech leader.

**Contribution to GDP:** Financial services add 9%, while technology accounts for 8%.

#### **6. Ireland:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Ireland excels in pharmaceuticals, technology, and financial services, leveraging its EU location to attract multinationals.
* **Policy and Innovation:** Competitive corporate tax rates and a pro-business environment draw global giants like Apple and Google.
* **Global Economic Impact:** EU membership facilitates trade and investment flows, ensuring robust economic growth.
* **Technology:** Tech innovations, particularly in cloud computing and AI, drive substantial economic contributions.

**Contribution to GDP:** Technology contributes 13%, with multinationals leading growth.

#### **7. Turkey:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Turkey’s focus on textiles, agriculture, and tourism diversifies its economic drivers. Infrastructure projects further bolster growth.
* **Policy and Innovation:** Industrial policies and renewable energy investments stabilize the economy.
* **Global Economic Impact:** Turkey’s geographic advantage enhances trade, tourism, and export markets.
* **Technology:** Emerging AI and e-commerce sectors show promising growth potential.

**Contribution to GDP:** Tourism and exports account for 15%, with tech’s role steadily increasing.

#### **8. Germany:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Germany’s industrial base, with its automotive and manufacturing sectors, stands out globally.
* **Policy and Innovation:** “Industry 4.0” initiatives integrate AI in manufacturing, promoting global competitiveness.
* **Global Economic Impact:** Export dominance, particularly in automobiles, sustains global trade influence.
* **Technology:** Innovations in robotics and AI keep Germany at the forefront of industrial advancements.

**Contribution to GDP:** The automotive sector adds 10%, while tech and smart manufacturing contribute 6%.

#### **9. Japan:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Japan integrates strong industrial exports with growing tech and service sectors.
* **Policy and Innovation:** Investments in robotics and AI maintain its leadership in automation.
* **Global Economic Impact:** Trade agreements and global leadership in automotive/electronics enhance economic output.
* **Technology:** Robotics, AI, and smart factory innovations lead technological contributions.

**Contribution to GDP:** Tech sectors contribute 8%, while industrial outputs add 20%.

#### **10. Italy:**

**Key Factors Affecting Trends:**

* **Economic Diversification:** Italy thrives on manufacturing, fashion, and tourism, alongside agriculture’s regional importance.
* **Policy and Innovation:** SME-focused policies and renewable energy investments strengthen economic stability.
* **Global Economic Impact:** Luxury exports and tourism dominate, supported by EU trade agreements.
* **Technology:** AI-driven manufacturing innovations enhance productivity across sectors.

**Contribution to GDP:** Tourism adds 13%, with manufacturing and tech advancements contributing 10%.

### Decreasing Factors for Per Capita Income in Each Country

### **United States**

* **Economic Inequality**: The gap between high and low-income earners continues to grow, limiting overall per capita income growth.
* **Healthcare Costs**: Rising healthcare expenditures put pressure on disposable income.
* **Global Competition**: Outsourcing and global market pressures reduce manufacturing jobs domestically.

### **Australia**

* **Dependence on Natural Resources**: Fluctuating commodity prices can impact GDP per capita.
* **Housing Affordability Crisis**: High housing costs reduce disposable income for the average citizen.

### **New Zealand**

* **Small Market Size**: Limited domestic market affects large-scale industrial growth.
* **Rural Economy**: A significant reliance on agriculture makes the economy vulnerable to climate changes.

### **Canada**

* **Energy Market Volatility**: Dependence on oil and gas exports exposes the economy to global price fluctuations.
* **Slower Population Growth**: A declining birth rate impacts economic output.

### **England**

* **Brexit-Related Uncertainty**: Challenges in trade and investment post-Brexit affect economic stability.
* **Aging Infrastructure**: Reduced investment in infrastructure limits growth.

### **Ireland**

* **Over-reliance on Multinationals**: Dependency on foreign companies makes the economy vulnerable to global shifts.
* **Tax Policy Scrutiny**: Increasing global regulations could reduce Ireland’s attractiveness for multinationals.

### **Turkey**

* **High Inflation**: Persistent inflation erodes purchasing power.
* **Political Instability**: Political and economic policies create uncertainty for investors.

### **Germany**

* **Energy Transition Challenges**: Shifting away from fossil fuels increases costs.
* **Aging Population**: A growing number of retirees strains social services.

### **Japan**

* **Demographic Decline**: Shrinking workforce due to aging population impacts GDP.
* **Stagnant Wage Growth**: Lack of wage increases limits consumer spending.

### **Italy**

* **High Public Debt**: Significant national debt impacts government spending on growth initiatives.
* **Youth Unemployment**: Limited opportunities for young workers slow economic momentum.

### Common Factors Influencing Per Capita Income in Developed Countries

### **Economic Diversification**

* Countries with a broad industrial base (e.g., Germany) show more resilience compared to those heavily dependent on a single sector (e.g., Australia’s reliance on commodities).

### **Policy and Innovation**

* Progressive policies in countries like Sweden and Denmark emphasize sustainability and technological advancement, driving steady growth.
* Countries lacking forward-thinking policies, like Turkey, experience stagnation or slow growth.

### **Global Economic Impact**

* Trade agreements and global market shifts affect all developed countries. For example, Brexit challenges England’s trade relationships with the EU.
* Resource-dependent nations like Canada and Norway face economic volatility due to fluctuating global commodity prices.

### **Technology (AI and Rapid Growth)**

* Technology hubs like Silicon Valley in the US and AI advancements in Japan and England contribute significantly to GDP.
* Countries investing in AI, like Ireland with multinational tech firms, see faster growth than those lagging in technological adoption.

### **Key Observations**

1. **Higher Growth Countries**: Ireland leads with a per capita income 1,872% above Pakistan's, driven by global demand and favorable policies.
2. **Comparative Insights**: Pakistan’s GDP per capita of $6,437 remains significantly lower than all analyzed countries, reflecting a need for enhanced industrialization and policy improvements.

# Explain Michael Porter’s Six Forces Framework. Illustrate with examples how each force influences competition within an industry.

### **Framework Explained**

Michael Porter’s Six Forces Framework, also known as the Porter’s Five Forces Model, is a tool used to analyze the competitive forces within an industry. The model helps to understand the underlying drivers of profitability in any given industry. It is based on the premise that there are five key forces that shape the level of competition and, ultimately, the profitability of businesses within that industry.

The initial five Forces purpose was:

1. Threat of New Entrants
2. Bargaining Power of Suppliers
3. Bargaining Power of Buyers
4. Threat of Substitutes
5. Industry Rivalry

In 2008, Porter introduced a sixth force, which is the **Power of Complements**. This adjustment expanded the model to give a more detailed view of the competitive forces affecting companies. It identifies six factors that influence an industry’s competitiveness and profitability. These forces help businesses understand the dynamics of their industry, allowing them to develop strategies to gain a competitive edge.

Below is a detailed explanation of each force:

### **1. Threat of New Entrants**

This force examines how easy or difficult it is for new competitors to enter an industry. If it’s easy for new players to join, existing companies face higher competition.

#### **Factors Affecting New Entrants:**

* **Barriers to Entry**: High startup costs, strict regulations, or strong brand loyalty can deter new entrants.
* **Economies of Scale**: Larger firms have cost advantages, making it harder for smaller players to compete.

#### **Example:**

* **Tech Industry**: Companies like Amazon and Google dominate because they have enormous resources, established brands, and advanced technology. A new e-commerce company would find it challenging to compete with Amazon due to the high costs of setting up warehouses, logistics, and marketing.

### **2. Bargaining Power of Suppliers**

This force analyzes how much influence suppliers have over the prices and availability of materials. If there are few suppliers for a crucial component, they have more power.

#### **Factors Influencing Supplier Power:**

* **Number of Suppliers**: Fewer suppliers mean more power.
* **Switching Costs**: High costs for changing suppliers give them leverage.

#### **Example:**

* **Automotive Industry**: Semiconductor suppliers hold significant power as there are limited manufacturers producing high-quality chips. During the 2020 global chip shortage, car companies like Ford and Toyota had to halt production due to supplier constraints.

### **3. Bargaining Power of Buyers**

This force considers how much influence customers have in determining prices and terms. When buyers have multiple options, they hold more power.

#### **Factors Influencing Buyer Power:**

* **Product Differentiation**: Unique products reduce buyer power.
* **Price Sensitivity**: Buyers with cost concerns push for lower prices.

#### **Example:**

* **Retail Industry**: In the fashion sector, customers can easily switch between brands like Zara, H&M, and Uniqlo. To attract buyers, these brands must frequently introduce discounts and new collections.

### **4. Threat of Substitutes**

This force looks at how easily customers can switch to an alternative product or service that meets the same need. A high threat of substitutes limits an industry’s profitability.

#### **Factors Affecting Substitution:**

* **Performance and Cost**: If substitutes are cheaper and effective, the threat is high.
* **Customer Loyalty**: Strong brand loyalty reduces the risk.

#### **Example:**

* **Transportation Industry**: Traditional taxi companies face significant threats from substitutes like Uber and Lyft. Customers find these ride-sharing services more convenient and often cheaper.

### **5. Industry Rivalry**

This force measures the degree of competition among existing players in the market. Intense rivalry reduces profitability as companies compete on prices, features, and services.

#### **Factors Driving Rivalry:**

* **Number of Competitors**: More competitors increase rivalry.
* **Market Growth**: Slower growth leads to fiercer competition.

#### **Example:**

* **Fast-Food Industry**: Brands like McDonald’s, Burger King, and Wendy’s compete aggressively by offering discounts, limited-time menus, and innovative marketing campaigns.

### **6. The Role of Complementors**

This additional force considers the role of complementing products or services that add value to the main product. A strong network of complementors can increase demand.

#### **Factors Affecting Complementors:**

* **Compatibility**: Complementary products must seamlessly integrate.
* **Collaborations**: Partnerships enhance mutual growth.

#### **Example:**

* **Gaming Industry**: Console manufacturers like Sony (PlayStation) and Microsoft (Xbox) benefit from strong relationships with game developers. Exclusive titles like *The Last of Us* or *Halo* increase the attractiveness of their platforms.

### **Interactions Between Forces**

Porter’s Six Forces don’t act in isolation. Instead, they interact to shape the competitive landscape. For example:

* High supplier power combined with intense rivalry can squeeze profits for manufacturers.
* A high threat of substitutes and new entrants can force established firms to innovate continuously.

#### **Example:**

* **Smartphone Industry**: Apple faces rivalry from Samsung, supplier power from component makers like Qualcomm, and the threat of substitutes from budget brands like Xiaomi. Despite this, Apple uses its ecosystem of complementors (e.g., App Store) to maintain a competitive edge.

## Michael Porter’s Six Forces Framework Applied to AI and New Technologies

Michael Porter’s Six Forces Framework helps analyze the competitive dynamics within industries. When applied to AI and new technologies, it provides insights into how artificial intelligence impacts competition, professional risks, and business strategies across different countries. Here's how each force relates to AI and its risks for professionals, along with competition among big companies globally:

### **1. Threat of New Entrants**

AI technologies lower the barrier to entry in some sectors by providing tools and platforms for startups and new competitors. However, they also raise barriers through capital-intensive research and development (R&D) requirements and access to data.

**Impacts:**

* **Professionals:** New entrants may automate repetitive tasks, threatening jobs in industries like manufacturing and customer support.
* **Big Companies:** Established companies in countries like the United States (e.g., Google) face threats from smaller, agile firms leveraging open-source AI (e.g., OpenAI’s APIs).

**Example:** In China, Tencent and Alibaba face competition from startups focusing on niche AI applications in healthcare and finance, reducing the monopoly of big players.

### **2. Bargaining Power of Suppliers**

Suppliers in AI industries include chip manufacturers, cloud infrastructure providers, and AI research talent. Companies with exclusive access to advanced technologies and skilled professionals hold significant power.

**Impacts:**

* **Professionals:** AI researchers and engineers are in high demand, giving them leverage in salary negotiations but also creating intense competition for roles.
* **Big Companies:** Countries like Taiwan dominate the chip manufacturing supply chain (e.g., TSMC), affecting global giants such as Nvidia and AMD.

**Example:** The U.S. government’s restrictions on exporting advanced AI chips to China have increased the bargaining power of suppliers like Nvidia while affecting Chinese AI companies' growth.

### **3. Bargaining Power of Buyers**

Buyers, including businesses and governments, demand cost-effective and innovative AI solutions. Their bargaining power increases as more AI vendors enter the market.

**Impacts:**

* **Professionals:** Companies may seek cheaper automated alternatives for routine work, reducing demand for certain job roles.
* **Big Companies:** In Europe, GDPR and strict data privacy regulations empower consumers to demand transparency from AI developers like Google DeepMind and Amazon.

**Example:** Countries like Japan prioritize consumer-centric AI applications in robotics, where buyers (businesses) heavily influence product development.

### **4. Threat of Substitutes**

AI-based technologies often replace traditional tools and methods, leading to a significant threat of substitutes in industries like transportation (self-driving cars) and healthcare (AI diagnostics).

**Impacts:**

* **Professionals:** Lawyers, radiologists, and other white-collar professionals face risks as AI substitutes human expertise.
* **Big Companies:** In India, IT outsourcing giants like Infosys must pivot from traditional services to AI-driven solutions to stay competitive.

**Example:** AI-powered chatbots are substituting human customer service agents globally, with significant adoption in countries like Canada and Australia.

### **5. Industry Rivalry**

Competition among tech giants like Google, Microsoft, Amazon, and Baidu fuels rapid AI advancements. The rivalry extends globally, with countries vying for dominance in AI innovation.

**Impacts:**

* **Professionals:** High competition drives demand for specialized AI roles but can create job insecurity in oversaturated markets.
* **Big Companies:** U.S.-based OpenAI’s partnership with Microsoft intensifies competition with China’s Baidu and Tencent in generative AI.

**Example:** Germany’s Siemens and Bosch compete in industrial AI applications, targeting manufacturing automation, while rivalries in autonomous vehicles exist between Tesla (U.S.) and Nio (China).

### **6. Threat of Complementary Products**

The success of AI technologies often depends on complementary products like IoT devices, 5G infrastructure, and edge computing solutions.

**Impacts:**

* **Professionals:** AI integration requires interdisciplinary skills, pressuring professionals to upskill in complementary areas like cloud computing.
* **Big Companies:** Japan’s Toyota partners with AI firms to develop self-driving car systems, leveraging complementary technologies like LiDAR sensors.

**Example:** The U.K.’s healthcare sector uses AI tools alongside electronic health record systems, showcasing the dependence on complementary technologies.

### **Country-Specific Highlights**

**United States:** Home to Silicon Valley, the U.S. dominates AI innovation. Companies like Google DeepMind and OpenAI invest heavily in generative AI and automation, posing risks to both manual and intellectual jobs globally.

**China:** Focused on becoming the global leader in AI by 2030, China’s AI giants like Tencent and Baidu compete fiercely in consumer applications, affecting smaller domestic competitors.

**Germany:** Industrial AI applications thrive, but energy costs and workforce adaptation remain challenges, influencing the competitiveness of firms like Siemens.

**India:** With a focus on IT and outsourcing, Indian companies invest in AI to stay relevant, but workforce retraining is a critical concern.

**Japan:** AI integration in robotics and industrial automation leads global advancements, although an aging population constrains workforce flexibility.

### **Conclusion**

Michael Porter’s Six Forces Framework is a powerful tool for understanding industry dynamics. By analyzing these forces, businesses can identify threats, opportunities, and areas for improvement. Whether it’s maintaining customer loyalty, negotiating with suppliers, or responding to substitutes, this framework helps companies navigate the complexities of competitive markets effectively.

By applying this framework to real-world industries, businesses can develop strategies to stay ahead in an ever-evolving competitive environment. Porter’s Six Forces Framework reveals the multifaceted impact of AI on industries and professional risks. While AI fosters innovation and efficiency, it disrupts traditional job markets and intensifies global competition among countries and companies.