# A Comprehensive Overview: Excess Deficient Demand and Its Scope

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### ABSTRACT

The ideas of excess and deficient demand are fundamental to understanding aggregate demand dynamics and their consequences for the overall health of an economy. An overview of excess and deficient demand concepts, their significance, and their usefulness in economic analysis and policy formation are given in this chapter. Excess and deficient demand analysis aids in the identification of economic imbalances and the development of effective management strategies for them by policymakers, entrepreneurs, and economists. Excess demand arises when total demand exceeds the economy's ability to produce goods and services at the going rate, which creates inflationary pressures. A reduction in output and potential deflationary pressures emerge from sufficient demand, on the other hand, when total demand exceeds the economy's capacity to provide goods and services.

#### **KEYWORDS:**

Aggregate Demand, Central Bank, Excess Deficient, Excess Demand, Insufficient Demand.

#### I. INTRODUCTION

Excess demand in microeconomics refers to a situation where there is a greater demand for goods and services than what can be produced by the businesses. A product's excess demand, or the difference between the amount demanded and the quantity delivered, is expressed by an excess demand function in microeconomics in terms of the product's price and perhaps other factors. It is the demand function for the good minus the supply function. The surplus demand in a strictly exchange-based economy is equal to the total of all agents' demands minus the total of all agents' initial resources. The excess supply function of a product is equal to the excess demand function minus the product's supply function. The first derivative of surplus demand is often negative with respect to price, indicating that a higher price will reduce excess demand. If the excess demand function value is zero that is, when the market is in equilibrium and the amount provided and demanded are equal then the price of the good is said to be the equilibrium price. It is said that the market clears under this circumstance. Excess demand will typically be negative if the price is greater than the equilibrium price, indicating that there is a surplus positive excess supply of the good and not all of it being made available to the market is being sold. Excess demand will typically be positive if the price is lower than the equilibrium price, indicating a shortage. Whether or not the economy is in general equilibrium, Walrus' law suggests that the price-weighted total surplus demand is always equal to zero for every price vector. This means that there must be an excess supply of one product if there is an excess demand for another[1], [2].

Excess demand describes the circumstance in which total demand (AD) exceeds total supply (AS), which corresponds to an economic production level at full employment. The result of excessive demand is an inflationary gap. The difference between actual aggregate demand and the demand necessary to achieve full employment equilibrium is referred to as the inflationary gap. Causes of excessive demand:

**1.** An increase in consumption expenditure as a result of an increase in consumption propensity or a decrease in consumption propensity.

- **2.** Tax reduction a tax reduction may also result in an increase in disposable income and consumer demand.
- **3.** An increase in public spending will also lead to an increase in government demand for goods and services, which will lead to surplus demand.
- **4.** An increase in investment as a result of a decline in interest rates or an increase in anticipated returns.
- 5. Fall in imports a decline in imports caused by higher import prices than domestic prices could also result in excessive demand.
- 6. Increase in exports -when demand for exports rises as a result of domestic goods being sold for comparably less abroad or as a result of a decline in the value of the local currency.
- 7. Deficit financing excessive demand may result from rising money supply resulting from funding deficits.

**Impact of Deficit Financing:** Since the economy is already at a full employment level, surplus demand is not a desirable position as it does not enhance the level of aggregate supply. The following effects of excessive demand on output, employment, and general price levelBecause the economy is already at a full employment level and there is no idle capacity in the economy, extra demand has no impact on the level of output. The economy is already at full employment and there is no involuntary unemployment, thus there won't be any change in the level of employment. Effect on overall price level: Since total demand exceeds total supply, excess demand causes an increase in overall price level sometimes referred to as inflation. When aggregate demand (AD) is lower than aggregate supply (AS), the economy is said to be in a state of deficit demand, which corresponds to full employment.

### **Deficit Demand Causes**

- 1. Decline in propensity to consume a decline in consumer spending as a result of a decline in willingness to consume results in insufficient demand for goods and services in the economy.
- 2. Tax hikes higher taxes may cause AD to decrease as well. As a result, there is insufficient demand in the economy, which causes disposable income to decline.
- **3.** A decrease in government spending When the government lowers its demand for g/s due to a decline in public spending, it results in insufficient demand.
- **4.** Decrease in investment expenditure an increase in interest rates or a decline in expected returns causes this. It causes a decrease in the AD and a rise in insufficient demand.
- 5. Rise in imports when domestic prices are somewhat higher than international prices, it may cause a rise in imports, which suggests a decline in aggregate demand.
- 6. Exports may decline as a result of domestic product prices that are comparably higher or as a result of a rise in the local currency's exchange rate. This will cause a lack of demand. Impact of Low Demand Low demand has an inflationary effect on the economy. It has a negative impact on the economy's level of output, employment, and price level.
- 7. Inventory stock will expand as a result of insufficient overall demand, which will have an impact on output. The businesses will be compelled to budget for lower production within the following time frame. The anticipated output will therefore decrease.
- 8. Impact on employment. Due to a decrease in the projected output, insufficient demand results in inventory unemployment in the economy.
- **9.** Effect on general price level. Lack of demand for g/s in the economy results in inadequate demand, which lowers general prices [3], [4].

#### II. DISCUSSION

Key economic concepts such as excess and deficient demand are used to analyses aggregate demand dynamics and their effects on the equilibrium level of output and prices. For policymakers, entrepreneurs, and economists to evaluate the state of an economy overall and develop effective policy responses, an understanding of these ideas is essential. An overview of the ideas of excess and deficient demand, as well as their application to economic analysis, is given in this chapter. It investigates how

these ideas are applied to pinpoint instances of macroeconomic imbalances and direct policy responses. When total demand exceeds the economy's ability to provide goods and services at the current prices, excess demand, often referred to as demand-pull inflation, arises. This circumstance frequently causes pricing pressure to increase and may cause inflationary pressures. Increased consumer spending, expansionary monetary policy, or a spike in investment are a few examples of variables that might lead to excessive demand. Policymakers can implement actions to cool the economy by identifying excess demand, such as tightening monetary policy or introducing fiscal measures to lower aggregate demand.

Deficient demand, on the other hand, develops when total demand is lower than the economy's ability to provide goods and services. It is also referred to as a recessionary gap or demand shortfall. Deficient demand can result in decreased output, increased unemployment, and deflationary pressures on pricing. Reduced consumer expenditure, contractionary monetary policy, or a drop in investment are some of the causes. Policymakers employ expansionary policies, such as monetary easing or fiscal stimulus, in response to the identification of a deficient demand, in order to increase aggregate demand and enhance economic activity. Analysis of excess and deficient demand covers more than just the near term. It includes the structural and cyclical components of the economy. While structural imbalances are the outcome of long-term mismatches between aggregate demand and supply, cyclical imbalances are transitory variations in demand brought on by business cycles. It may be necessary to implement structural reforms to improve infrastructure, infrastructure quality, or regulatory constraints in order to recognize and remedy structural imbalances [5], [6].

The interaction between aggregate demand and aggregate supply is taken into account in excess and deficient demand analysis. It acknowledges that adjustments in the aggregate supply curve over the long run can result from variations in demand, which can affect an economy's capacity for production. For instance, sustained surplus demand might encourage spending and technological breakthroughs, which over time can increase the economy's capacity for production. In summary, the ideas of excess and deficient demand offer important insights into the dynamics of overall demand, pressures for inflation or deflation, and the equilibrium level of output in an economy. Policymakers can put appropriate measures in place to stabilize the economy, encourage sustainable growth, and ensure price stability by keeping an eye on and rectifying these imbalances. For the creation of sound economic policies and the general administration of an economy, it is crucial to comprehend the breadth of excess and deficient demand analysis.

#### Actions to Reduce Excessive Demand

**1. Reduced Government Expenditure**: This is an aspect of fiscal policy. The government spends a lot of money on administrative and infrastructure projects. Government spending should be reduced as much as feasible in order to control the condition of excessive demand. Less focus should be put on increasing revenue, as defiance and wasteful projects rarely contribute to a nation's development. Reduced government spending will lower the level of total demand in the economy and aid to alleviate inflationary pressures.

2. Lessening of Credit Availability: Through its monetary policy, RBI seeks to lessen credit availability in the economy.Quantitative Instrumentsincrease in bank rate- the central bank raises the rate in times of excess demand, which increases the cost of borrowing from the central bank. It compels commercial banks to raise lending rates, deterring potential borrowers from taking out loans. In addition to assisting in the reduction of loan availability, it also serves to balance out excessive demand.Open market operation the central bank provides securities for sale when there is an excess of demand. The reserves of commercial banks are decreased through the sale of securities. It has a negative impact on the bank's capacity to generate credit and lowers the amount of overall demand in the economy.Commercial banks are required to keep legal reserves. A rise in such is a clear way to limit loan availability. The central bank increases CRR and SLR to reduce excessive demand.

## **Quantitative Tools**

An increase in margin requirements: When an economy experiences excessive demand, the central bank raises the margin, which limits banks' ability to create credit. It makes borrowing money less appealing to borrowers, which lowers aggregate demand.Moral persuasion advice to discourage lending. During periods of excessive demand, the central bank recommends, requests, or persuades the commercial banks not to issue credit for speculative or non-essential activity. It aids in lowering credit availability and overall demand.Selected credit controls. In times of high demand, the central bank imposes credit rationing to stop an excessive flow of credit. It aids in removing the extra demand. Actions to address insufficient demand1. Increased government spending. In times of low demand, the government should spend more on public works like building highways, flyovers, and other structures in order to give people more money. This will increase overall demand and assist in resolving the shortage of demand.The central bank uses its monetary policies to ensure easy access to credit and lower borrowing costs during deflationary periods[7], [8].

### Quantitative tools

- **1.** A decline in bank rate occurs when there is insufficient demand, and the central bank begins to buy securities on the open market. It expands the money supply, strengthens consumer purchasing power, and raises the amount of overall demand in the economy.
- 2. Reduction in the legal reserve requirement commercial banks must keep legal reserves. A reduction in these buffers increases loan availability. The central bank reduces CRR and SLR to address the insufficient demand. It boosts the commercial banks' ability to create credit by increasing their effective cash resources. It will increase borrowing and contribute to maintaining the demand deficit.

### **Qualitative Tools in Category**

When demand is insufficient, the central bank lowers the margin, giving banks more flexibility to extend credit. Commercial banks can now lend more money against the same amount of security thanks to margin reductions. It increases the availability of credit and aggregate demand while encouraging borrowers to take out larger loans. Moral persuasion in times of low demand, the central bank recommends or convinces the commercial banks to promote credit. It increases aggregate demand and credit availability. Selected credit controls During periods of insufficient demand, the central bank removes credit rationing and works to promote credit. In a three-sector economy, which includes households, businesses, and the government, excess and deficient demand are present. AD is the sum of consumption (C), investment (I), and government expenditure (G).

The new AD curve (C + I + G) is above the old AD curve (C + I) with the introduction of the public sector. Deficit in Demand Remedy: The deficiency in demand can be filled by raising aggregate demand by the same amount as the deflationary gap. In order to close this deflationary gap, the government must employ its fiscal tools, which include raising spending. When government spending rises, aggregate demand changes to reflect the new amount of government spending, or AD. To maintain the economy's full employment equilibrium, the new curve AD is adequate. Solution for Excess Demand - In order to address the issue of excess demand, the overall level of demand must be decreased by an amount equivalent to the inflationary gap. The government must employ its fiscal tools to cut spending. Government spending cuts will lower total demand and close the inflationary gap.

#### **Application of Excess and Deficient Demand**

Numerous real-world uses of excess and deficient demand notions can be found in economic analysis and policy making. The following are some crucial areas where these ideas are applied:

**Macroeconomic Policy:** The examination of excess and insufficient demand aids in the formulation of suitable macroeconomic policies. Policymakers may enact contractionary measures in cases of excess demand to lower overall demand and quell inflationary pressures. These actions could entail tightening monetary policy raising interest rates, decreasing the money supplyor conducting contractionary fiscal

actions cutting public spending, raising taxes. In contrast, expansionary measures like monetary easing and fiscal stimulus are used during times of insufficient demand to increase overall demand and stimulate the economy.

**Management of Inflation and Deflation:** Inflationary forces are frequently attributed to excess demand, whereas deficient demand can result in deflationary pressures. Policymakers can effectively manage inflation and deflation by identifying these imbalances and putting them into practise. For instance, central banks may alter interest rates and the amount of money available to curb inflation during times of excess demand, while using monetary easing measures to fend against deflation and boost demand during times of shortage. Analysis of surplus and deficit demand aids in corporate planning and investment decisions. Businesses can forecast possible changes in customer demand and modify production levels, pricing strategies, and investment plans as necessary by being aware of the state of aggregate demand. Businesses may think about boosting capacity, manufacturing, and spending on new technologies during times of surplus demand.

On the other hand, during periods of insufficient demand, firms could concentrate on cost-cutting measures and streamlining their processes to match the decreased demand. Market forecasting and risk assessment are made possible by the examination of excess and insufficient demand, which offers insights into market circumstances and enables organisations to estimate demand trends and evaluate associated risks. Businesses might spot possibilities or possible weaknesses by keeping an eye on demand that is too much or too little in particular areas or industries. For instance, excessive demand in a certain industry may indicate prospects for new entrants or growth plans, whilst inadequate demand may necessitate that enterprises diversify their clientele or look into alternate areas[9], [10].

### **Economic Stability and Employment**

Both excessive and insufficient demand have an immediate impact on both the level of economic stability and employment. Taking care of the oversupply helps keep the economy from overheating and promotes price stability, which supports overall economic stability. In a similar vein, expanding supply in response to insufficient demand boosts output levels, lowers unemployment rates, and boosts economic activity. In conclusion, the use of excess and deficient demand concepts is essential for macroeconomic and microeconomic analysis, policy development, and decision-making. Businesses and policymakers may execute the necessary actions to stabilise the economy, control inflation or deflation, and make wise strategic decisions by comprehending the dynamics of aggregate demand and spotting imbalances.

#### Benefits to Users of Excess and Insufficient Demand

Understanding and managing the state of an economy might benefit from the examination of excess and deficient demand. Identifying excess and insufficient demand has the following major benefits: Economic Stability Analysis of excess and insufficient demand helps to advance economic stability by spotting anomalies in total demand. Policymakers can take the necessary steps to maintain price stability, lessen the pressures of inflation or deflation, and lessen the dangers of economic instability by monitoring and addressing these imbalances. This helps to create an atmosphere where the economy is more stable and predictable.

**Effective Policy Formulation:** The examination of surplus and deficient demand offers policymakers insightful information that will help them create efficient macroeconomic strategies. Policymakers can create appropriate monetary and fiscal measures to address these imbalances by determining whether the economy is suffering excess or insufficient demand. This aids in maintaining economic stability, encouraging growth, and assuring efficient resource allocation. Management of Inflation and Deflation. Inflationary forces are frequently attributed to excess demand, whereas deficient demand can result in deflationary pressures. Policymakers can effectively manage inflation and deflation by identifying these imbalances and putting them into practise. In order to boost or restrain aggregate demand and maintain price stability, this includes modifying interest rates, deploying monetary policy tools, and using fiscal measures. Planning and investment decisions for firms are aided by an understanding of the conditions

of excess and deficient demand. Businesses may match their production levels, pricing tactics, and investment plans appropriately by analysing market circumstances and demand trends. This improves their capacity to adjust to shifting market conditions, optimise business processes, and take advantage of opportunities or lessen hazards brought on by changes in the overall demand.

**Employment Levels and Labour Market Dynamics:** Analysis of excess and insufficient demand has effects on employment levels and labour market movements. Expanding supply in response to insufficient demand boosts output levels, lowers unemployment rates, and stimulates the economy. In a similar vein, reducing excessive demand can help maintain a steady labour market by preventing overheating and undue wage pressure. Understanding these processes helps with employment planning and labour market strategies. Analysis of excessive and insufficient demand enables organisations to evaluate risks and spot market possibilities. Businesses can forecast demand changes, modify their plans, and broaden their clientele by keeping an eye on imbalances in particular sectors or industries. As a result, they are better able to handle the risks brought on by shifting market conditions and seize new possibilities. Understanding and controlling an economy's state can benefit greatly from the examination of excess and deficient demand. It aids in managing inflation and deflation, encourages economic stability, facilitates the formation of effective policies, directs company planning and investment choices, affects the dynamics of the labour market, and aids in risk assessment and market opportunity identification. All of these benefits work together to make the economy more robust and efficient

#### **Excessive and Insufficient Demand by User Scope**

Analytical of excess and deficient demand covers a range of economic analytical and policy-making topics. The extent of excess and insufficient demand is illustrated by the following key dimensions.

Analysing Excess and Insufficient Demand: It is a crucial component of macroeconomic study. By analysing the balance between total demand and total supply, it offers insights into the state of an economy as a whole. The dynamics of economic growth, inflation, and unemployment as well as how they interact are better understood thanks to this analysis. Evaluating excess and insufficient demand allows economists to analyse an economy's overall health and spot any potential imbalances or weak spots. Decisions regarding fiscal and monetary policy are heavily influenced by studies of excess and deficient demand. This research helps policymakers choose the best course of action for controlling aggregate demand. Contractionary measures may be used in cases of excess demand to lower overall demand and minimise inflationary pressures. Conversely, expansionary policies can be used to bolster aggregate demand and stimulate the economy during times of insufficient demand. The evaluation of these policy actions' efficacy and effects falls under the purview of excess and deficient demand analysis.

**Management of Inflation and Deflation:** Analysis of Excess and Deficient Demand is Essential for Inflation and Deflation Management. While deficient demand can contribute to deflationary pressures, excess demand frequently results in inflationary forces. Policymakers can pinpoint the underlying reasons of these price changes and put the necessary safeguards in place to preserve price stability by keeping an eye on excess and deficient demand. This could entail changing interest rates, carrying out open market transactions, or using fiscal policy tools to affect overall demand. Excess and inadequate demand analysis has effects on businesses and their strategic decision-making. Business strategy and investment decisions. Businesses can adjust their production levels, pricing strategies, and investment decisions by having a thorough awareness of the status of aggregate demand.

This study aids companies in forecasting demand changes, spotting market possibilities, and evaluating potential hazards. Businesses can optimise operations and boost their competitiveness by tailoring their plans to the current conditions of excess or inadequate demand. Dynamics of the labour market are included in the analysis of excess and deficient demand. Unemployment and underutilization of labour resources can emerge from insufficient demand, whereas excessive demand can cause labour shortages, wage pressures, and a tight labour market. Understanding these dynamics aids stakeholders and policymakers in developing labour market strategies that address skill gaps and advance job

possibilities. Additionally, it influences labour market rules, workforce planning techniques, and wagesetting decisions.

Analysis at the Sectorial and Regional Levels: Demand analysis, both excess and deficient, can be applied at these levels. An economy may experience varied degrees of excess or insufficient demand in different industries and locations. In order to develop targeted policies or interventions, it is helpful to analyse these variances in order to locate sector- or region-specific imbalances. For instance, a location with insufficient demand may require investment incentives or infrastructure improvements to boost economic activity. Specific industries experiencing excess demand may also require measures to handle capacity constraints. The analysis of excess and deficient demand encompasses macroeconomics, fiscal and monetary policy, managing inflation and deflation, company strategy, investment choices, labour market dynamics, and sectorial/regional analysis, to name a few. This extensive breadth enables a holistic view of an economy's status, assisting stakeholders and policymakers in making wise decisions to support stability, growth, and sustainable development.

#### **III.** CONCLUSION

Insights into the dynamics of aggregate demand and its implications for the overall health of an economy can be gained through the analysis of excess and deficient demand. Macroeconomic analysis, policy development, and decision-making all depend on the concepts of excess and deficient demand.Excess and deficient demand analysis covers a wide range of aspects of economic study and policy. It aids decision-makers in managing inflation and deflation, making fiscal and monetary policy decisions, and fostering economic stability. Businesses can also use this study to manage risk related to shifting market conditions, coordinate their plans, and make investment decisions. Maintaining price stability, fostering sustainable growth, and addressing lab our market dynamics all depend on an understanding of excess and deficient demand. It enables decision-makers to put into place the proper actions to balance total supply and demand, guaranteeing the best use of resources and minimizing economic imbalances.

#### REFERENCES

- [1] J. Fattah, L. Ezzine, Z. Aman, H. El Moussami, en A. Lachhab, "Forecasting of demand using ARIMA model", *Int. J. Eng. Bus. Manag.*, 2018, doi: 10.1177/1847979018808673.
- [2] I. Staffell en S. Pfenninger, "The increasing impact of weather on electricity supply and demand", *Energy*, 2018, doi: 10.1016/j.energy.2017.12.051.
- [3] Y. Chen, P. Xu, J. Gu, F. Schmidt, en W. Li, "Measures to improve energy demand flexibility in buildings for demand response (DR): A review", *Energy and Buildings*. 2018. doi: 10.1016/j.enbuild.2018.08.003.
- [4] W. Boon en J. Edler, "Demand, challenges, and innovation. Making sense of new trends in innovation policy", *Sci. Public Policy*, 2018, doi: 10.1093/SCIPOL/SCY014.
- [5] M. Berger en J. Worlitschek, "A novel approach for estimating residential space heating demand", *Energy*, 2018, doi: 10.1016/j.energy.2018.06.138.
- [6] E. M. Skaalvik en S. Skaalvik, "Job demands and job resources as predictors of teacher motivation and well-being", *Soc. Psychol. Educ.*, 2018, doi: 10.1007/s11218-018-9464-8.
- [7] P. Beaudry, D. A. Green, en B. M. Sand, "In search of labor demand", *American Economic Review*. 2018. doi: 10.1257/aer.20141374.
- [8] T. J. Lybbert, S. A. Vosti, K. P. Adams, en R. Guissou, "Household demand persistence for child micronutrient supplementation", *J. Health Econ.*, 2018, doi: 10.1016/j.jhealeco.2018.09.010.
- [9] N. Voulis, M. Warnier, en F. M. T. Brazier, "Understanding spatio-temporal electricity demand at different urban scales: A data-driven approach", *Appl. Energy*, 2018, doi: 10.1016/j.apenergy.2018.08.121.

[10] S. Nan, M. Zhou, en G. Li, "Optimal residential community demand response scheduling in smart grid", *Appl. Energy*, 2018, doi: 10.1016/j.apenergy.2017.06.066.