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Evaluating Economic Crisis Theory: A Comprehensive Examination of the Aftalion Methodology

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Abstract: The Aftalion methodology of economic crisis theory presents a complex and comprehensive understanding of economic crises, the exploration of which is riddled with nuanced considerations and varied perspectives. Primarily, it emphasizes the counterintuitive reality that the precursor to a crisis can be a period of prosperity, a concept that often remains overshadowed by a multitude of economic factors, including price evolutions and various defining economic junctures. Certain theories postulate that this initial phase of prosperity, paradoxically, sows the seeds for an impending crisis, a proposition that invites ample debate and necessitates further empirical validation. Theories focusing solely on the cost of production elements also come under scrutiny in the context of the Aftalion methodology. The theory recognizes the consequential roles of financial market fluctuations, particularly those pertaining to the stock market, alongside the influential forces of monetary and capitalist markets. Further, the state of employment significantly contributes to the shaping of economic conditions, underscoring the necessity of examining these factors in understanding crises. Finally, the methodology posits that variations in the discount rate could be pivotal triggers for economic crises, an assertion that calls for comprehensive investigation. The Aftalion methodology thus provides an exhaustive framework to examine economic crises, inviting scholars and practitioners alike to delve deeper into these mechanisms and their implications.

Keywords: Aftalion methodology; Economic crisis theory; Prosperity phase; Cost of production; Stock market fluctuations; Monetary markets; Capitalist markets; Employment conditions; Discount rate

1. Introduction

The present study draws inspiration from two major sources: Albert Abram Aftalion (1874-1956), a Swiss-French economist with a focus on Production Crises and Monetary Crises, and Gustavo del Vecchio (1883-1973), an Italian economist whose main contributions were to the field of Capital and Interest.

Numerous explanations for economic crises have emerged in the literature, particularly from 1907 onward, and these often address the expansion of monetary and credit mass, speculation, discontinuity in savings and fixed capital formation, and imbalance in distribution between employers and employees. However, it has been observed that these explanations frequently rely on a non-existing "fact", or attempt to elucidate the crises through other "truths", while failing to present a complete picture of these truths.

A noteworthy disparity exists between the extensive, and admittedly precise, observations made by economists such as Aftalion and others about the characteristics of cyclical alternatives during economic crises and the seeming unreality of the supposed foundational facts often presented. Economists like Jevons, Pareto, Lexis, Schumpeter, Fisher, and others have made valuable contributions to understanding crises, introducing theories and "facts" that have challenged commonly held truths.

In examining crises, three distinct research paradigms emerge. The first, which has yielded the most beneficial results, seeks to describe singular events occurring during crises, such as fluctuations in employment and prices. The second focuses on certain specific historical conditions, explaining why modern production methodologies and exchange and distribution systems experience crises while older ones, which also faced different economic conjunctures, did not. Although significant discoveries have been made in this area, they often seem to stem from speculative assertions.

The third research paradigm involves a theoretical approach, seeking to construct a simple structure that can recreate the rise and fall of prosperity, or, alternatively, the apparent cyclical pattern of prosperity and decadence periods. This paradigm can incorporate economics-logics or psycho-social considerations, leading to either an economic theory or a psychological/social theory of crises, respectively.

Classical economists have argued that a crisis corresponds to the disruption of the equilibrium between fixed and circulating capital, a conclusion drawn from the examination of English crises in the first half of the 19th century. However, these economists have not provided a comprehensive theory explaining the origin of this disruption. Despite numerous attempts at explaining this phenomenon, all have faced rigorous critique, leaving the field at a standstill without an acceptable provisional truth or scientific theories.

It is hoped that by examining the methodology and ideas of these two figures, a deeper understanding of economic crises can be gained, contributing to a more comprehensive understanding of these phenomena. This study aims to continue the tradition of innovation in economic thought, following in the footsteps of these remarkable figures and seeking to further refine our understanding of the dynamics of economic crises.

Upon review of the classical economists' analysis of English crises in the first half of the 19th Century, a key observation, which may appear strange to modern understanding, was identified. This observation centers around the notion that a crisis corresponds to the disruption of equilibrium between fixed and circulating capital. However, despite this important contribution, the classical economists fell short of providing an adequate theory or genus of this disruption.

Although specific determinations and minute technical specifications were provided, the general theoretical framework appears to remain static. Every explanation offered has been subjected to rigorous and exhaustive critiques, yielding unsatisfactory provisional truths or scientific theories. Despite these limitations, considerable progress has been achieved in crisis theory, thus inspiring optimism for further advancements.

In the ongoing quest for a comprehensive understanding of crises, a multi-tiered research approach has been adopted. The fourth tier focuses on the symptoms of crises, with a strong emphasis on those which become evident in response to varying economic conditions. The inherent challenge of this tier is that the identified symptoms can be secondary phenomena, results of unrecognizable factors, yet significant insofar as they are readily identifiable and clear in their manifestations.

The fifth tier of this research approach is concerned with identifying the cause of a crisis, as defined by an occasional event that initiates a boom and its subsequent transition to a contraction phase. It is a critical error to conflate the core research of this tier with the theory of crisis. Conversely, it is a lesser error to disregard the rationale for this type of research by merely relegating it to a prior phase.

While this research paradigm does not exist in total isolation from theoretical research, it significantly stands to benefit from progress. Progress in this paradigm can be achieved via empirical and inductive routes, without necessarily relying on the theoretical deductions derived from the two phases of the conjuncture.

The knowledge of crises, therefore, is seen to be multifaceted, allowing for continued improvements without having arrived at an all-embracing theory that encapsulates all paradigms. This is particularly evident when examining the work of certain influential economic thinkers in this field.

2. Prices, Incomes, and Productivity

Albert Aftalion's fundamental work within the realm of economics (Aftalion, 1913) has provided noteworthy insights on the periodicity, universality, and global interconnectedness of price swings. Born on 22nd October 1874 in Ruse, Bulgaria, Aftalion passed away on 6th December 1956 in Geneva, Switzerland. Despite his origins, his French identity is evident in his contributions to the field, including his founding of the economic journal, Revue Economique, in 1956. His array of work—approximately 15 major pieces—spanned a multitude of economic topics such as industrial crises, general overproduction, socialist principles, monetary expansion, revenue theory, and the cyclical nature of capitalist production techniques, amongst others.

The main thrust of Aftalion’s studies can be categorized into two primary levels: factual evidence of crises and theoretical development regarding such crises. His work can be demarcated into three segments: a statistical review of cyclical evolution and related crises, a critical analysis of extant theories, and the formulation of novel theories.

The first segment, a statistical analysis, is laudable for its comprehensive collation of existing knowledge, supplemented by novel insights. It primarily focuses on crises and the capital involved. The second segment, a critical analysis, provides an insightful critique of theories surrounding capital availability as a cause of crises. The third segment introduces original thoughts and offers intensive observations, though it invites differing opinions on its acceptability.

An overarching theme from his analysis of cyclical price movements is that price swings are periodic, universal, and international. The cyclical motion impacts not only industries manufacturing productive capacity tools but also those producing consumption goods. The former demonstrate a higher intensity of such movement, while the latter showcase a quicker swing.

However, industries producing consumer goods differ in their sensitivity to crises. Some follow a pace consistent with their counterparts, while others are less responsive. Industries such as cotton, glass, transport, lighting, and potentially construction align with the former group. Meanwhile, sectors relating to silk, clothing, materials like linoleum, furniture, and agriculture align with the latter. Despite these disparities, industries producing production goods generally participate more actively in cycles than their consumer goods counterparts.

There is no absolute rule, but the prices of raw materials generally exhibit a higher intensity of swings than finished products. Metals, in particular, indicate rapid and immediate fluctuations. A transition from examining prices to incomes indicates that in periods of rising economic prosperity, nominal salaries, interest rates, and real national income—through reductions in unemployment—simultaneously increase. The consequent increase in income leads to an increase in the mass of capitalized savings, which counteracts previous theories surrounding insufficient or excessive consumption and savings.

Of particular interest is the study of the periodic variations in cost and productivity. Analysis reveals that, for specific industries such as coal extraction, steel, and blast furnacing, productivity per worker is inversely related to prosperity. This correlation can be attributed to a higher ratio of employed workers to capital during periods of expansion, rather than a decrease in employed capital.

Linking income variations to cost variations elucidates a relationship between cost changes—primarily salaries—and price changes. The relationship is less intense and lagged. This segment forms the connection between the descriptive and theoretical parts of the work, which is further elaborated upon in subsequent sections.

3. Aftalion and the Classicists

The third segment of the current study revolves around the analysis and evaluation of Aftalion's work, particularly its second and third sections, also referred to as his Books Four and Five to Eleven respectively. The constrained space forbids a comprehensive synthesis of Aftalion's counterarguments against more widely accepted theories at the time. Instead, the recommendation stands for the original text to be consulted, as it demands an explicit comparison between four or five theories, often linked with little regard for logic in popular explanations of individual crises.

In the third portion of his work, Aftalion uniquely sequences his theory, bringing forth each element one by one, demonstrating how, in combination with the previous elements, it falls short of providing a full explanation for price fluctuations. While the approach invites and supports further study, it doesn't lend itself well to a concise synthesis. Instead, the current paper presents Aftalion's theory in its complexity, appraising its significance independent of analytical judgement on its individual elements.

Aftalion's theoretical explanation of crises has strong ties to those put forward by Tugan-Baranowsky, Spiethoff, and Lescure. A common thread among their theories is the focus on specific production-related facts to explain economic crises. Despite the specific references to Marxist passages, these theories align more with traditional classical economics, emphasizing the origins of crises in production-related facts, with only secondary attention given to the circulation of goods. It should be noted, however, that this emphasis on the latter is often seen amongst the classical economists themselves, albeit likely due to practical considerations and less in alignment with their system's spirit, which focuses primarily on the relationships between production and gives only secondary attention to those around circulation.

These crisis theories primarily highlight the impact of goods production on the occurrence and progression of a crisis, focusing on goods whose utility is exhausted over delayed and future consumption. The prosperity period witnesses the manufacture of these goods in abundance, whereas the depression period sees a decline in their production. This view on the issue can be observed in controversial English practices related to railway construction, a point also mentioned in John Stuart Mill's Principles (Mill, 1965).

A significant aspect of Aftalion's work resides not so much in his detailed observation of the duration of production processes, but in his meticulous coordination and subordination of factors such as price considerations, income considerations, costs in the nature of money, and events in the financial and speculation markets. These factors are always incorporated within the theoretical explanation of the same cycle. However, his work also emphasizes that the duration of these processes, through which the delayed alignment of supply to production and durable goods' demands occur, constitutes the fundamental aspect of crises.

4. Flaws in?

One of the most significant theoretical challenges in the study of crises is determining the reasons behind these fluctuations. Are those who limit their analysis to psychological factors correct, or should we also consider monetary factors, as classical economists of various schools have done, particularly those involved with banks that have money-issuing rights? Aftalion attempts to find an economic rationale beyond monetary factors and turns to the theory of value. His arguments span tens of pages (Aftalion op cit) and cannot be fully reproduced here; nor can they be easily synthesized, as they appear at first glance to be tainted by a fundamental, albeit common, error.

They attempt to explain general phenomena using reasoning that can only account for specific market situations.

The notion that goods available for consumption are more scarce and therefore have higher final utility during a period of prosperity compared to a period of depression is undoubtedly important. However, this does not necessarily mean that their prices are higher in the first period than in the second. Aftalion's observation that goods have higher marginal utility in the initial phase is valid, but this increased marginal utility only determines the higher price for existing goods or those being valued at the same time. It does not imply this effect for two distinct periods. To reach such a conclusion, one would need to assume a constant money supply and accept a completely new version of the quantity theory, in which the relationship between the money supply and consumption goods alone regulates the general price level. However, this approach does not contribute to a theory of crises, as it modifies the quantity theory in an unacceptable way and ultimately leads to explaining crises through a monetary factor, which is fundamentally different from Aftalion's proposal.

As odd as it may seem to critique a work filled with valuable research insights and strong theoretical spirit in just a few lines, there is not much else to add. On one hand, it is difficult to argue with the facts and opinions, both borrowed and original, that Aftalion employed to build his framework. On the other hand, it is challenging to identify the essential fact and argument to which everyone should adhere, given that those identified as such are either non-existent or based on fallacious relationships. Prices do precede production cycles, as the author suggests, and production occurs in the manner he describes. However, the problem of crises does not lie in determining one or the other of these facts. Rather, it is about identifying the relationship between them, even if acknowledging these facts can provide valuable insights.

Does such a relationship exist within the realm of economic facts or beyond them? And if it does exist, what is its nature? Aftalion implicitly assumes that this relationship is economic, as he seeks to identify it as such, and he wisely avoids engaging in fruitless debates. However, in our opinion, the way he presents this relationship is not acceptable and therefore does not warrant further exploration.

5. The Conceptualizing of Crises

Reframing the crisis theory, which has transformed from a minor segment to a principal component of economic studies, has been observed. The focus has shifted from historical anecdotes and socio-literary aspects to systemic treatment. Aftalion is credited for this streamlining, focusing on the theoretical issue of crises. The various theoretical structures have been absorbed, aiming to establish a concrete foundational theory.

In the study of crisis theory, not all causes, symptoms, or crisis facts are investigated. Instead, selective elements are used to draw connections. This may involve purely economic arguments or historical, technical, and judicial conditions. The method of investigation generally adheres to pure economic terms as much as possible, resorting to historical considerations only when indispensable. Identifying these limitations is a critical aspect of crisis theory and, more broadly, economic theory.

A crisis can be recognized within a pure economic framework. A crisis situation arises when there are commodities and individuals whose actual goods or services either have zero utility or are in such abundance that they are conserved for future use. This decision is not necessarily premeditated or desired at the time of production. Phenomena such as unemployment, reduced working hours, factory shutdowns, and stockpiling are all characteristic of an economic crisis (Gustavo del Vecchio, 1956). They manifest in varying intensities in different production, distribution, or exchange processes. However, an explanation for a crisis cannot be derived solely from a pure economic perspective.

The transition from understanding to explaining a crisis is where principles of pure economics may not always apply. The explanation of a crisis cannot solely rely on these principles. A crisis, as a state of imbalance, can also be explained in abstract terms, irrespective of its origin. This perspective has led to various attempts to explain crises, contextualized within the factual framework that can produce them. A crisis, when conceptualized in pure economic terms, covers an extensive range of economic turbulence. The 1907 crisis, for example, is a well-known case.

In pure economic terms, the generation of a crisis can be defined, but not its determination or subdivision. In applied economics, different crisis types can be distinguished and the specific determination process for each can be outlined. Several specific categories warrant careful attention.

6. Pure Economics/Concrete History

Distinct types of crises, as they shall henceforth be referred, are linked to specific technical/economic structures of societies. Some phenomena, despite their obscurity compared to more pronounced difficulties, are integral to these crises. These phenomena encompass production processes with prolonged timelines, production involving considerable quantities of slowly eroding fixed capital, consumption of highly durable goods, differentiation between salaried workers and entrepreneurs, utilization of monetary means of exchange or credit, and substantial fluctuations in the overall economic state. Apart from these scenarios, a myriad of potential forms of economic turbulence could be encountered or imagined, none of which can be classified as similar to a crisis. On the contrary, within these scenarios themselves, a broad spectrum of typical or ordinary economic turbulence can be identified.

The topic of crises necessitates an initial economic analysis before delving into subjective or sociological arguments. Examining the conditions outlined above would help determine whether any factors could potentially trigger an unusual turbulence, subsequently referred to as a "crisis". The objective is to discern between a purely economic categorization and a firmly historical categorization of crises, much like the current approach to all economic events. Public interest, in this context, is not confused with any of its specific manifestations, including industrial profit, the discount rate, or consolidated debt issues. The existence of both a pure economic genre and concretely historical species among the possible array is strongly emphasized here, requiring diverse justifications. Arguments valid for the former may suffice, but not for the latter. The inception of crises in the latter sense cannot be rationalized purely by economic arguments and requires firmly historical considerations, albeit distinct from broader psychological and social considerations.

Several elements can provide useful insight into the structure of an economic cycle. They include:

(1) Anticipating a general price increase contingent upon new relationships between the monetary mass and goods;

(2) A sluggish inclination of prices towards anticipated future levels, yet faster than for salaries, leading to an increase in immediate profits;

(3) An inadequate utilization of productive forces across various enterprises during unique periods of temporary equilibrium due to the advantage of exploiting partial monopoly elements they may possess;

(4) A discrepancy between raw materials for consumer goods production and raw materials for tools, pending a clearer delineation of their economic terms and technical classification;

(5) A higher resistance to decrease on part of salaries compared to prices.

The focus here is not to assert these elements as the sole constituents of crises. Instead, recognition is given to the significance of all other factors mentioned above and beyond. These elements are considered vital as they alone enable an economic explanation of crises.

7. Change in Country Relationships

Transforming the provided content to adhere to high academic standards entails improving the language use, employing a more passive voice, and restructuring the flow for enhanced logic and comprehension. This reworked section endeavors to accomplish these aims:

Modifications in relationships between nations is a topic that has elicited debates among economists, primarily due to its complex nature and the necessity to examine individual crises across time. It becomes imperative to understand that these crises have a monetary basis, which, in turn, brings into light the limitations of anti-monetary theories. These theories, while containing valid arguments and factual basis, fail to provide a comprehensive understanding of the problem at hand.

Adversaries often present strong objections that cite instances wherein crises have arisen independent of variations in the money supply and demand. These crises, they argue, stem from an extraordinary surge in specific industries due to novel inventions or openings. Acknowledging the veracity of these facts does not, however, negate the inherent monetary theory of crises. On the contrary, it serves to bolster the theory.

Swift and expansive progress is not uniformly distributed across nations. It is often limited to one or a few countries, thereby causing a general rise in prices within these nations due to increased industrial activity. According to classical theories of international trade, higher productivity leads to higher normal prices. Therefore, it can be argued that production dynamics catalyze crises through a circulatory effect.

When a nation that has been previously isolated from the international exchange of goods and services connects with richer markets, a sudden surge in prices is triggered. This change, which can be attributed to advancements in communication technology or increased security, sets the stage for a potential crisis.

Global monetary causes of crises emerge when universal production-related conditions do not produce such crises. Local monetary causes, such as banking system developments or certain exchange rates situations, are quickly balanced out by the close relationships between various countries. Hence, they do not independently result in crises. However, local production-related factors can cause significant local monetary variations, leading to economic events that are not automatically offset by other elements.

It should be noted that this exposition merely provides a brief analysis of the issues at hand, and a more in-depth examination is needed for further understanding and comprehensive evaluation of the theory presented.

The first point, largely considered orthodox, stands in stark contrast to the second point, which draws more closely from the crisis theory postulated by figures ranging from Owen to Rodbertus (Owen Robert). However, it does not entirely extend to their theorizations, as it fundamentally diverges in its essence. These theorists, despite repeated critiques, deserve recognition for their attention to a truth supported by a robust body of statistical evidence.

This undeniable truth, not the premises, is the focal point for explaining its significant repercussions. An observable phenomenon during periods of price inflation is the delayed increment in wages, which subsequently leads to a considerable increase in profit. Additionally, it has been observed that the prices of production goods tend to fall below equilibrium levels over time in relation to their future counterparts. This phenomenon further contributes to the overall expansion of profits.

These circumstances provide an explanation for the most distinct characteristics of an economic crisis. Large capital accumulations, maximum utilization of production facilities, full employment of the available workforce, the demand for labor from alternative markets, the emergence of luxury industries, rampant speculation, increases in corporate capital, and significant movements of capital towards new regions are all attributable to the swift growth of capital without a concurrent decrease in real wages for workers.

However, it must be considered that some profits are merely nominal, such as those linked to an increase in the price of existing goods, or the goods replacing them. This nominal profit can lead to a fallacy of overconsumption, and explaining a crisis solely through these facts, as some economists, especially French, have tried, equates to a quantitative error, neglecting the impact of individual market factors.

The relationship between these fluctuations in goods and labor prices, and the crisis, will be elucidated once several other issues have been clarified.

8. Crises and Conjunctures

In an astute and comprehensive exposition of production at reduced costs, Marshall (Marshall, 1907) outlines a compelling economic principle. This field of applied economics offers primary importance, yet notably lacks widespread application or exploration. This principle elucidates, within a theoretical construct, phenomena observed by practical individuals, offering a more nuanced understanding compared to superficial interpretations offered by less meticulous theorists. An elevation in prices, for example, instigates an upsurge in production by compelling factories to exceed their previously established production limits.

Marshall's insightful evidence presented to the UK's Silver Commission (UK's Silver Commission, 1888) stands as a timeless contradiction to the prevailing view that a surge in prices universally benefits an economy, while their decrease ushers in widespread economic strife. Any contention proposing that all increments in prices result in a persistent or even permanent surge in production would be in stark opposition to his philosophy.

The observations of practitioners, supported by statistical data, suggest that during periods of economic prosperity, there is a pervasive engagement of all 'workers' as 'employees' for fixed hours, leading to the maximum utilization of production plants. The rapid turnover of raw material and product stocks appears characteristic of such prosperous periods. These conditions seemingly grant workers not only a nominal salary increase but also a real one, without adversely affecting capital or profits. On the contrary, profits tend to surge in a way that bolsters consumption and further capital accumulation for capitalists. Thus, it becomes evident that prosperous periods indeed harbor intrinsic value by fostering improved economic conditions, independent of technical or other economic progress.

The next point of focus is the fourth element, which pertains to the second major question surrounding crises. Crisis theory should address why a favorable conjuncture also results and why it may give rise to a depression, with or without panic, or simply reject these phenomena as illusory. However, considering the empirical movements of prices and incomes and the related phenomena, practical observations and statistical data confirm the existence of a special period of prosperity linked to the first period in a conjuncture and a depression associated with the second. This depression may be relative, signifying a condition inferior to the maximum expansion during the peak of prosperity, or merely a deceleration of progression, while the new elevated condition evolves more rapidly. However, once this state is identified, it becomes imperative to examine the attempts to elucidate the preceding upswing's origin.

The inception of an economic depression can potentially be traced to a preceding period of excessive price increases, a situation that seemingly misaligns with the prevailing monetary conditions. It is postulated that a depression marks a return to equilibrium or a swing in the opposite direction of the displacement that may have occurred previously. Though this evolution is not entirely implausible, it is insubstantial, even without explicit proof, to consider it a standalone explanation for an economic crisis. An economic crisis is deemed to be far more complex than mere alterations in prices, even though such changes might form a crucial element of a crisis.

An array of theories has been presented that offer various explanations for a crisis. Some propose that a collapse corresponds to the exhaustion of available capital funds, while others suggest that it stems from a disparity between income levels and production growth. These theories exhibit inconsistencies upon examination of their theoretical premises, which are often found to be non-existent.

Furthermore, a rise in production costs, occurring organically over a period of prosperity, should not be deemed as the singular determining factor of an economic crisis. These costs undeniably impact the evaluation of production plants and other produced goods during times of prosperity. However, these developments, while significant, are inadequate in explaining the fundamental phenomenon of a depression.

For proponents of the Austrian school's analysis of production costs, these costs can never be considered the ultimate economic reason. Hence, variations in these costs, even though they are among the elements that require examination during a crisis, do not constitute a primary cause. The contention of these positions with scientific consensus does not render them unacceptable, but for demonstrative purposes, it is inadvisable to reiterate their suitability for singular case studies.

Lastly, it is asserted, though not proven, that the rise in production costs is responsible for triggering a depression. The correlation between the rising production costs and the crisis events is not under dispute; however, this correlation is not necessarily indicative of their role as determining elements of the economic conjuncture. This correlation rather than the rise of the costs themselves remains the primary point of contention in this discourse.

9. Production and Substitutionality

The proposed solutions identified in previous and recent studies on economic crises certainly do not present as paradoxical. These solutions merely offer a more precise, stringent interpretation of what was initially identified during the nascent phases of crisis research and observed in subsequent studies. It is argued that the trigger for changes in the economic conjuncture resides in the phase of economic ascent and within the fabric of production relationships. This viewpoint appears indisputable from the perspective of orthodox economists, notwithstanding potential debates by authors less inclined towards strict analytical methodologies, such as newspaper commentators.

The critical determinant that inverts the economic conjuncture is posited to originate during the ascent phase and is inherent within the production relationships. Again, this notion should face minimal opposition from orthodox economists, despite potential challenges from authors lacking rigorous analytical methodologies. Moreover, it can be argued that during periods of prosperity, imbalances occur not between production and consumption, but within the realm of production itself. This results in overproduction not in relation to prior production levels, consumable quantities, exchangeable quantities, or distributable quantities, but in comparison to concurrent production from another side. This proposition forms the crux of the theory of outlets, representing one of the few consistent and secure elements in crisis theory.

Further insights can be drawn from the shared perspectives of classical economists and the Austrian school, proposing that disequilibrium stems from the overproduction of fixed capital. This viewpoint echoes the principles outlined by Stuart Mill, and any attempt to revisit this discussion may prove time-consuming as these principles remain beyond argument. It is perhaps more productive to focus on defining the distinction between fixed and circulating capital and to seek factors during the ascent phase capable of causing such imbalances. These two areas of focus may or may not have definitive answers, but they cannot be bypassed through elaborate discourse or dismissed without also refuting the economic causality of crises. This perspective aligns with the pure economic conceptualization of crises, and it sets the context for the relationships between distinctive problems of pure and applied economics.

Addressing the first issue of defining the distinction between fixed and circulating capital, contemporaneous authors, including Aftalion himself, have shed considerable light on the matter. These insights have been gathered from extensive and meticulous studies on economic relationships over time, capital and interest theories, and the relationships between demands for various goods. For the purposes of this discussion, a criterion, mostly based on previous research, is proposed. It suggests that goods that are overproduced during a period of prosperity are often those which:

(a) Are distant from consumption;

(b) Have a strict complementary relationship with other goods which are closer to consumption;

(c) Are in a less easy substitution relationship with other goods which are close to consumption and easily substitutable for other goods which are strictly complementary to others which are close to consumption;

(d) Are less prone to being produced at levels which can be conserved as stocks, either absolutely or without great losses;

(e) Are less likely to provide service in other circumstances to which one today renounces.

This criterion seeks to identify the goods and economic conditions that contribute to imbalances and overproduction, leading to economic crises. It provides an analytical approach that aligns with the methodologies preferred by orthodox economists, thus providing a firm basis for further investigations into the causes and solutions of economic crises.

The enumeration described above, while possibly complex or even ambiguous, facilitates differentiation between goods whose overproduction incites crises, and goods whose scarce production represents another facet of the same phenomenon. This differentiation also establishes a basis for high-level grading in specific instances.

Railway infrastructures and coal serve as prototypical examples of the two types of goods impacted by over and underproduction respectively. Due to their lesser susceptibility to accidental supply fluctuations and an ample elasticity in demand, they are chosen for this analysis. A simplified examination reveals that railway infrastructures exhibit characteristics that make it easier to observe overproduction, yet lacks features that allow for easy adjustment. In contrast, coal production shows diametrically opposite tendencies. Numerous instances can be drawn from past experiences where demand for coal and railway installations became pivotal factors in the transition from prosperity to depression in various countries.

However, it should be clarified that the argument is not suggesting a direct correlation between an excessive availability of railway infrastructures or an overproduction of coal and the onset of depression. Instead, the focus is to highlight the crucial role that production plays, which in recent times has become evident, particularly in these two extremes.

There often exists a transitional period, arguably the most dramatic in the economic cycle, between the end of a rising trend (often also signalled by stock market panic), and the onset of depression in both production and prices. This period is marked by an increasing disharmony in production, and despite attempts to rectify this imbalance, the forces from the previous period continue to intensify, further exacerbating the discord between the varied directions taken by production. While this period presents several noticeable phenomena, these are not central to the cycle of crises.

In conclusion, the outlined narrative is part of a larger study focusing on the thoughts and analytical approach of Aftalion and his contemporaries, and these particular phenomena are addressed in the final part of this comprehensive analysis.

10. Production, Prices, and Salaries

The characteristics distinguishing excess-produced goods from those in deficit can be bifurcated into two categories. The first pertains to attributes favoring their status as superior quality goods at the correct level. The second relates to characteristics that hinder automatic correction once such a tendency is demonstrated. These two categories ought not to be conflated with the cause for production disharmony; the latter is merely sustained, not initiated, by these aspects.

Among the various qualities determining overproduction, a significant attribute identified is the distance from the consumption limit, thereby indicating that a good is produced in excess quantity. It is deduced that other attributes merely augment the challenge in rectifying the error thus established.

It is observed that during periods of prosperity, there exists a distinct tendency wherein prices fall below the equilibrium level in relation to future prices, and wages still fall short of this level, matching the concurrent general price level. This, in turn, gives rise to the relative overproduction of goods whose full consumption is distant, leading to excessively lengthy production processes.

To comprehend this phenomenon, a simplification of the intricate problem is suggested. The absence of any significant distinction in wage increase across different industries during a period of prosperity is noted, despite the competitive environment in which businesses operate. This leads to an imbalanced proportion between goods with long and short term production runs.

Even an increase in prevailing interest rates during such periods does not hinder this development, as the rate is lower than what it should be to maintain price stability over time, as suggested by the study Fisher-Brown theory. Further, the current interest rate is lower than what it would be to balance current wages with future prices. This is attributed to the complex monetary movement, which while unable to resist, merely serves to partially modify the resultant phenomena, including those leading to crises.

This argument does not delve into granular details that may be deemed unnecessary for the broader context, much like how a farmer does not routinely resort to using the millimeter or milligram. Instead, the focus remains on depicting the overarching trends and influences shaping economic behaviors during prosperity periods. The emphasis is on understanding the mechanisms rather than on creating a detailed micro-level narrative.

11. When Prices Stop Rising

In the exploration of economic crises, various elements such as the period of ascendancy, stock exchange panics, and static periods have been discussed. Bank panics and depression, however, warrant further elucidation. Panics are often incidental, largely tied to banking structures and practices rather than being integral components of crises. Depression in production and prices can exist independent of panics. Panic often indicates overstimulation and an abuse of the preceding granting of credit; a regular occurrence, but not inherently necessary in the economic cycle. It can be said that a panic often signals an impending depression where mere self-sustainability can explain its fundamental characteristics. Therefore, it is essential to demonstrate how production disharmony following a static period instigates a genuine phase of depression.

A widespread assumption suggests that the characteristics of a depression should mirror those of an expansion phase. However, crises are not only dynamic but also superimposed on another dynamic element. Thus, the depression period cannot be symmetrical to the expansion period because it does not usually entail a reversal of other dynamic elements, above which those constituting the expansion would have been layered.

When the escalation of prices halts upon reaching equilibrium, the disproportion often becomes apparent, directing production processes towards an unreversedly long route. From this cessation arises a unique condition succeeding prosperity, which reveals the erratic direction of production. It is then necessary to explain why production and prices contract at this juncture, independently of panic's effects on credit and speculation.

Resources and labour used in overproducing goods will, in due time, be excluded from use by entrepreneurs due to a lack or total absence of economic value. Concurrently, the main stimulus for unrestricted expansion of productive forces in individual firms - a rise in prices - would no longer exist, leading to the unutilization of resources in overproducing industries.

Consequently, alongside a drop in prices, there is an absolute reduction in production, which becomes generalized due to its reflection in lower profits and savings, thereby reducing the demand for durable goods. This also results in lower consumption capacity for the working classes due to diminished wages from reduced work hours.

The decline in prices during a depression period is not a fundamental factor and can be constrained. The crucial elements are lower production, consumption, and subsequent investments. The diminished prices can be attributed to an overproduction during the preceding period, a widespread sense of desolation that exacerbates the crisis's effects, or reasons related to money hoarding and credit restrictions.

In conclusion, if a price rise logically precedes the production expansion, characterizing the ascent period, their fall succeeds the production contraction that constitutes the depression. During a depression, conventional supply and demand dynamics restore the normal harmony among various productions, further accelerated by demographic and capital economic progress, and when price-increasing monetary influences are more rapid. Meanwhile, the disequilibrium between prices and wages, which exacerbates depression, decreases, and a normal relationship resumes.

12. Successive Crises

The observed prosperity surge has been attributed predominantly to extrinsic, often monetary, factors in the immediate timeframe. However, an insufficiency is noted in these theories' ability to elucidate the re-emergence of crises. Economic depression has been defined (Del Vecchio, 1956) as a phase enabling novel forces to trigger the next cycle, yet no single force has been identified as inherently capable of its initiation.

The steep decrease in prices, frequently cited as the catalyst for the subsequent cycle, appears to contribute to this effect. Despite not being an integral, organic component of the industrial cycle, it is seldom absent. Ultimately, excessively low prices, which extend the depression phase, converge with wages over time. This convergence occurs at a lower level than the normal monetary equilibrium, potentially stimulating the onset of a new economic cycle. However, this cycle is anticipated to be less intense than its predecessor, since it represents a reverberation of the former cycle and is subject to less force due to the attenuated activities that initially amplified its expansion and contraction tendencies.

Hence, periodic reoccurrences of crises with progressively diminishing intensity are contemplated in this analysis. In reality, each succeeding crisis, despite theoretically being of lower intensity than the preceding, would likely surpass the latter's resultant level due to the extrinsic influences of novel causative factors. These factors are proposed to cause the expected surge in market prices, an event that has been theoretically associated with the genesis of the first cycle.

The impacts of the preceding cycle may elucidate certain secondary aspects of the subsequent cycle, such as its inception and diminished intensity. However, these impacts cannot explain the primary factor of its formation with significant intensity. This suggests that the field must be open to new or pre-existing influences, which re-emerge after being counterbalanced for a duration by the static or depressive period's elements.

While these insights do not purport to resolve the complex issue of relationships between successive crises cycles, they aim to illustrate how this could constitute a distinct problem compared to explaining a single cycle. Contrary to common belief, it is suggested that while the phases of a specific cycle are organically interconnected, the emergence of a succeeding industrial cycle holds a more complex relationship with the termination of the previous cycle. This relationship may hypothetically be influenced by the continuous growth in population and capital, and relentless technological progression in modern society. These dynamic forces, after each relative depression period, may manifest with renewed credit systems, intense development of raw materials, and unexpected price rises, thereby precipitating a new crisis cycle.

13. Conclusions

This research proposes the necessity of viewing all economic problems through the lens of crisis theory, suggesting that it is a crucial part of the economic system, rather than a distinct theory. The patterns identified in discount movements are summarized as follows:

- The discount is high during the escalation of a crisis,
- It escalates to very high levels during stock market panics,
- It is high during periods of stasis,

- It peaks during panic periods between stasis and depression,
- It decreases during depression.

These observations contradict the idea that crises primarily stem from production issues, as fluctuations in the discount rate often do not reflect such problems. Criticisms from Aftalion and Del Vecchio (Del Vecchio, 1956) suggesting the weak connection between discount rates and production also point in this direction.

It can be inferred that the ostensibly high discount rate in times of prosperity is mostly nominal, as it usually does not match the surge in prices. The correlation between the supply and demand of savings is not thin during prosperous times. Hence, the high discount cannot be attributed to inherent features of capitalism or production.

In times of panic, the high discount rates can be classified as strictly monetary factors. Similarly, the low discount rate during depression periods is not caused by an excessive supply of capital, but instead by the slow reduction and stagnation of prices.

The phenomenon of stasis, which occurs between the end of production rise and the beginning of its reduction, presents a theoretical challenge. In such periods, overproduction of specific goods often burdens the share, lending, and employment markets. It is suggested that the persistent and intensifying tension in the discount market during such periods stems from a different source than in the preceding period.

Two possible explanations emerge: either a decrease in capital supply amid rising demand or a strong monetary contraction, hinting at direct or indirect hoarding. However, this issue remains complicated due to intricate relationships between these two factors and others not elaborated here.

The period of stasis is characterized by high salaries, maximum employment, and high direct or indirect demand for money. In addition, foreign creditors often impose rigid cash payment requirements, and bank credits are frequently not renewed. Intense speculation, price increases, and capital flight in the later stages of the rise could lead to a significant depletion of the country's reserves. These factors may lead to an elevated discount rate and a more inflexible approach from bankers.

Despite these observations, the effect of the reciprocal demand among fixed and circulating capital on the discount rate remains unclear. Considering all factors, it appears that such conditions do not significantly influence the discount rate.

A new perspective arises when considering that the stasis period coincides with a peak in salaries and a decline in profits. Given that most savings are derived from profits, this scenario can lead to a demand shift towards immediate consumption goods and away from long-term consumption goods. This shift disrupts the equilibrium between the supply of investment goods and demand, leading to a real, not monetary, reason for the higher discount rate.

However, this opens a new debate on the changing relationship between monetary and capitalistic causes. According to a viewpoint explained elsewhere (Del Vecchio, 1913), it could be proposed that in a disequilibrium scenario, the higher-cost position in the discount market sets the rate and removes any efficacy from the lower-cost position. Therefore, monetary factors may take precedence over the capitalistic cause of the high discount rate during the stasis period. Consequently, the variation in the discount rate over a moderate time frame can be associated with either monetary or price-related factors.

In conclusion, the presented hypothesis proposes that no economic problem cannot be discussed from a crisis perspective, indicating the integral role of crisis theory in economic systems. Herein, the focus lies on discount rate movements, which have been observed to be:

- Elevated during a rising period of a crisis,
- Significantly high during periods of stock exchange panics,
- High during stasis periods,
- Extremely high during panic periods between stasis and depression, and
- Low during depression.

Although crises often originate from production issues, variations in discount rates seldom reflect this nature. Aftalion and Del Vecchio's (Del Vecchio, 1956) shared scepticism about this relationship between discount rates and production is noteworthy.

A high discount rate observed during a prosperity period, which seems inherently high, is rather an illustration of nominal terms; it frequently fails to align with the rise in prices. Consequently, this high discount rate, neither as an effect nor as a cause, is not a fundamental characteristic of capitalism or production.

The increased discount rates during panic periods are strictly influenced by monetary factors. Conversely, the low discount rate observed during a depression period is not attributed to an oversupply of capital; it is linked to the gradual reduction and static nature of prices.

A significant challenge lies in the theoretical definition of facts concerning a stasis period. In such periods, overproduction of certain goods is common, which directly and indirectly weighs on share markets, lending, and employment. The persistence and deepening of tension in the discount market during such periods requires a different reasoning than the previous period.

Two extreme explanations are provided: a reduction in the supply in the face of demand for capital, or a significant monetary contraction, indicated by a trend of direct or indirect hoarding. This problem is complex due to the intricate relationships between these facts.

Stasis periods correspond to when salaries reach their maximum, and they coincide with the highest direct or indirect demand for money for small payments. Several factors during these periods may contribute to a significant reduction in the country's reserves, ultimately affecting the discount rate.

The question still remains: do the conditions for reciprocal demand amongst fixed and circulating capital influence the discount rate? Upon consideration, the answer appears to be negative.

One final point for consideration introduces a capitalistic explanation for the high discount rate during a stasis period. Such a period is characterized by maximum salaries and minimum profits. Considering the larger part of savings come from profits, the stasis period presents a significant new factor. It reflects a higher demand for immediate consumption consumer goods and a lower demand for long term consumption goods. This imbalance between the supply of investment goods and the demand for them could provide a real, not monetary, reason for the higher discount rate.

New doubts emerge concerning the changed relationship between these various causes: monetary on one hand, and capitalistic on the other. In the various supply and demand positions that oppose each other in the discount market, the position with higher cost determines the rate, effectively neutralizing the one with lower cost.

The capitalistic cause for the high discount rate during the stasis period is below monetary factors. It can be excluded from elements that concretely determine the discount rate. In this sense, the variations of the discount rate over a not-too-long time can be related to either monetary or price factors, generally with basic underlying monetary facts.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares that they have no conflicts of interest.

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