Does the failure of the Great Leap Forward affirm the Austrian school’s criticisms of socialism?

Aidan Harkin  
King’s College London

This essay will address the question of whether the socialisation of China during the Great Leap Forward (GLF) had failed due to the reasons given by the Austrian school of economic thought. This essay examines the thought of Austrian theorists including Von Mises, Hayek and Boettke who believed that attempts to create socialism unwittingly creates unexpected consequences due to its inability to calculate in the same way the free market can due to the lack of decision-making feedback signals that prices would normally provide. Market socialist Oscar Lange and US professor Bryan Caplan’s criticisms of the Austrian position will also be applied to the available evidence to provide a differentiated assessment. The results indicate that the lack of prices along with destruction of incentives did attribute to the failure of the GLF, affirming the Austrian position around the necessity of calculation. Whilst the position of socialism’s impossibility is not directly examined here this case provides further research towards its answerability.
Introduction:

Prior to the release of Von Mises’ (1990) famed article ‘economic calculation in the socialist commonwealth,’ there was a recognised flaw with the socialist model; that is if everyone were producing according to his or her ability how would people be incentivised if they were paid the same? What’s more, even if the assumption that all the citizens bought into the idea of a new socialist man how in the first instance could economic planners know what to tell the population what to produce? In the absence of market prices the Austrian school economists believed socialism wasn’t possible and argued that a fully socialised economy, free of prices, would mean that there would be no way to calculate and prioritise the different methods of production. This would create a calculation problem. (Rothbard, 2006) As Von Mises stated ‘socialism cannot be realised because it is beyond human power to establish it as a social system.’ (1996, p680) His definitive statement is absolutely clear in its intent but as recognised by many contributors to the debate surrounding the importance of prices and incentives is less clear. This essay therefore will seek to identify more precisely the reasons for the failure of socialism by looking at the policy failure of the Great Leap Forward (GLF) rather than taking at face value the Austrian argument that both of these factors can be attributed to the failure of socialism and its unworkability. Emphasising this position, Cottrell and Cockshott (1993, p.168) state that many economists are fine to follow the ‘march of history,’ and much is taken for granted since the collapse of the Soviet Union.

It is important from the outset to have a clear definition of socialism in order to fully engage in the debate surrounding the policy failure. This essay will use Boettke and Leeson’s (2005, p.1) definition describing it as a social system where there is ‘state ownership of the means of production,’ with its ends constituting a post-scarcity state. Marx foreseen socialism as a social model designed with the promise to create abundance for the people from ‘each according to his ability, to each according to his need.’ The end of scarcity that a socialist...
state aims to achieve would occur through ‘existing improvements and scientific procedures...with a resulting leap forward which will assure to society all the products it needs.’ (Marx & Engels, 1969, p.51)

In researching the reasons for the failure of socialism, the case researched relates to the socialist transformation of China in the period of 1958 – 61, an epoch that is also known as the ‘Great Leap Forward’ (GLF). Mao was influenced by the writings of Marx and Engels in the creation of his own unique theory. Maoism departs from western Marxism in that agrarian socialism was the basis of Mao’s revolution, combining socialist economic policies with the agrarian nature of the society. However many of his ends for the creation of a socialist society and removing capitalism’s contradictions were similar such as the promotion of ‘common ownership,’ of property. (D’Mello, 2009, p.45) The GLF aimed to accelerate industrialisation in China, bringing it into a new socialist period. The officials charged with running the programme had high ambitions stating that ‘the GLF would propel China to surpass Great Britain in industrial production in 15 years.’ (Li & Yang, 2005, p.841)

The choice of China during the GLF as a qualitative case study over similar socialist states such as Cuba or North Korea is due to the extent to which the country closely operated to the ideological vision of socialism with widespread nationalisation and destruction of private property, making it a suitable case study for the investigation of calculation problems. This is comparable to what Boettke and Leeson (2005, p.13) attributed to Russia’s experiences of ‘war communism’ with its ‘unprecedented state control over the economy.’ The GLF was a period of incredible social and economic transformation through the leadership of Mao Zedong in order to meet the challenges and conditions of a socialist state that ultimately ended in disaster and widespread famine. The official explanation remains that bad weather and its effects on the grain yield is the single greatest factor. (Li & Yang, p.840) This ignores the impact of government influence that constituted a recipe for the disaster.

Analysis and Theory:

The Socialist Calculation Debate

‘Is there a greater tragedy imaginable than that, in ourendeavour consciously to shape our future in accordance with high ideals, we should in fact unwittingly produce the very opposite of what we have been striving for?’ – Hayek, Road to Serfdom (2001, p.23)

Marx and Engels were especially sparse in their details of their envisioned socialist utopia apart from that it would be of common ownership and that it would involve economic planning without any advice on modus operandi. As Ellman (2009, p.17) states a widespread view emerged in the Marxian community that ‘the superiority of planning...would enable society as a whole to coordinate production.’ Marx envisioned a state in which the contradictions of capitalism would be overcome through central planning and would eventually lead to the state withering away. He saw the problem bound up in the competitive market system that stemmed through all segments of society, leaving ‘no other
nexus between man and man than naked self-interest,’ (Marx, 2000) hence it needed to be eradicated.

The lack of perceived value and money in a proposed socialist economy would always pose difficulties to achieving accurate economic calculations. A critical issue for planners is how resources can be allocated effectively and to whose ends? Without competition among private property owners how do socialist planners adjust to the lack of prices and not arrive at an arbitrary decision? (Von Mises, 1990, p.40) The price system under capitalism allows individuals to translate their subjective values into objective information that allows a rational allocation of resources, this tight feedback mechanism is lacking in socialist economies. The Austrian school, including Von Mises and Friedrich Hayek, initially challenged socialism assuming that central planning of the modern economy is impossible. Without market prices central planners would be blind to ‘relative scarcity’, and could not use capital efficiently. (Lavoie, 1981, p.41) This however was challenged by neoclassical economists and market socialists including Lange and Lerner that admit the importance of markets and prices however believe common ownership reconciles this with socialism and makes it feasible. (Lavoie, p.42, 1981) These are the key issues of the socialist calculation debate, which if it could be proven that central planning could be effective in achieving accurate economic calculations would weigh favourably on the planner’s side and on the feasibility of socialism.

According to Boettke (2008) the Austrian school is an institute of economic thought that focuses on studying the actions and importance of individuals. Those examined in depth, representing the school in this essay include Ludwig Von Mises and Friedrich Hayek and Peter Boettke, renowned for their arguments against socialism because of its infeasibility as an economic reality. One of the great contributions that Von Mises made to the field of economics was that decision-making is reliant on private property and its institutional context; decisions are only made available through the process that the market allows. (Rothbard, 2006) Without private property there is no capacity for a market and without a market there can be no prices and this means that there is no rational way for capital goods to be rationally utilised. (Boettke, 2001, p.31) More generally the lack of civil liberties that result from the confiscation of private property and restrictions of political liberties would be in itself an economic detriment. Von Mises (1990, p.13) stated that in a complex economy, planners would simply not know what to do without a clear opportunity cost involved with production plans. Mises stated that economic calculation in terms of market prices is advantageous as it allows comparisons with individuals where direct ‘interpersonal utility comparisons,’ are out of the question. It also allows the costs of complicated processes of production to be calculated that permits the economic efficiency of work to be gauged and enables prices to be refined to a ‘common unit.’ (Kirzner, 1988, p.12) Therefore the economic problem is the ‘distribution of available resources between different uses,’ and without market prices socialism would be at a disadvantage in solving this. (Kirzner, 1988, p.13) Von Mises’ concerns with the lack of economic accounting and planning were in part that it was an irrational basis for the allocation of resources and ‘takes us away from rational economics.’ His views on socialism were compounded in the idea that if markets and money were abolished, the socialist economy would be an impossible task. Human cooperation is the key to calculation, however at an individual level not centrally controlled. Socialisms inability to build up and maintain capital without monetary calculation, as
Salerno states reduces human’s ability to plan and act accordingly thus destroying along with market economics, society as well. (Von Mises, 1990, p.38)

Friedrich Von Hayek was very much influenced by Mises’s argument on calculation and added to the debate through what he referred to as the knowledge problem. Hayek portrayed the role of markets as a communicator of information; he stated that socialist calculation is impossible because of the lack of markets that ‘evaluate the success or failure of different investment decisions,’ therefore not capable of evaluating decisions. (Auerbach & Sotiropoulos, 2012, p.2) Hayek drew attention to the role of prices in communicating information. He forwarded the view that markets were essential as a process of discovery and competition played the central role in how markets work towards ‘mutual adjustment of decentralised decisions.’ (Kirzner, 1988, p.8) The knowledge problem that Hayek referred to claims that the information in an economy does not belong to one person or one group; it is spread out among the various members of society, the data which is certain in a society is never taken in the form of a ‘single mind which could work out the implications.’ (1945, p.519) Interventions within the economy that try to centralise information only hampers the spontaneous market and leads to erroneous decisions, due to the lack of a known ‘best use of resources...ends whose relative importance only...individuals know.’ (Hayek, 1945, p.520) A planned economy will only have so much potential knowledge, limited by the ‘potential knowledge of an individual or small group of planners.’ (Martin, 2010, p.213)

Market socialists and neo-classical economists challenged the Austrian position, including those examined in this essay Oskar Lange and Bryan Caplan. Lange agreed that efficiency of calculations was important but that there was no need for private ownership over the means of production. (Auerbach & Sotiropoulos, 2012, p.1) As Auerbach and Sotiropoulos, (2012, p.12) states this was conceived as a form of ‘capitalism without capital markets.’ Caplan a US professor of economics also questions whether the socialised economy’s main problem was planning. He argues that historical evidence suggest poor incentives was the real economic problem and that the Austrian-school argument lacks any sound reasoning on this basis. Caplan (2004, P.33) explains that just like businesses, governments can act the same way and ‘it can make the same guess.’ However, whilst errors can exist in both socialist and market systems, the difference arrives at what signals there are for errors to be made clear and how they’re corrected. The market consists of a ‘competitive-entrepreneurial process of discovery,’ which socialism lacks. (Kirzner, 1988, p.4) Scarcity implies benefits from a price system as it makes an efficient means for communicating information; it also acts as a promotion to the discovery of unknown information. Mises rejects Lange’s position that socialist managers can calculate from non-market prices, as prices without a reflection of entrepreneurial ‘judgment’ is a contradiction ‘each individual separately regards the actual market price as given data to which he has to adjust.’ (Kirzner, 1988, p.14) As Von Mises states ‘the entrepreneur...prevents the persistence of a state of production unsuitable to fill the most urgent wants of the consumers in the cheapest way.’ (Kirzner, 1988, p.15) Furthermore the market offers a tighter feedback mechanism than does polities, as the extended order is shaped by activity within institutions, such as private property and these can either improve or worsen the plans of an individual. (Martin, 2010, p.218) Prices act as a signal from which to base further action and profits ‘sort out successful strategies,’ therefore individuals can adjust to scarcity accordingly. Whereas socialism lacks
these signals along with the correct ‘institutional features,’ for such an adjustment to take place. (Martin, 2010, p.219)

Whilst agreeing that socialism fully conceived would mean an end to economic calculation, Caplan’s main argument makes the point that calculation was not the most important issue, but that of incentives, counter to the Austrian school position. Referring to Boettke he stated there is little defence of an impossibility claim without knowing the severity of the lack of pricing; the ‘only way to salvage impossibility is to reinterpret it as an empirical claim and look to the evidence of history.’ (2004, p.40) Caplan (2004, p.41) also believes that the socialist states examined by the Austrian economists were mainly agrarian and previously did not have prices, hence lacking prior calculation. Caplan is correct in pointing out the significance of the incentive argument, nevertheless it appears that Caplan’s arguments lack a certain level of clarity as rebuked by Gonzalez. (2008) His historical research is ‘highly selective,’ focusing mainly on the Russian military sector and as stressed by Gonzalez (2008, p.191) this sector does not live up to Caplan’s descriptions and played a key role in the collapse of the system. Caplan’s observations of the incentive problem are also somewhat flawed, he characterised leadership incentives as ideological constraints and indifference of planning to results. However this is even adverse to standard public choice theory as actors are assumed to be rational actors seeking the largest utility in their own interest. (Gonzalez & Stringham, 2008, p.192) In support of this Boettke and Leeson’s (2005, p.18) argument for an empirical reality to be examined, convincingly states that ‘socialist leaders, contemporary economists, and the first historians of the socialist experience in Soviet Russia seemed to have given priority to the calculation problem.’

**Incentives, Prices and the GLF**

The structural changes at the time of the GLF were no doubt catastrophic with goods seized from peasants and many forced into starvation which very obviously impacted grain production. The new socio-economic structure produced disincentives both throughout the party and among the farmers in the countryside. Peasants did not reap the rewards of their work and officials were awarded for meeting extravagant targets and often punished for telling the truth. Even within the socialist industrial sector, things were not much better with bans on ‘overtime pay; the lack of reward for prompt deliveries,’ and ‘equal rewards for products of unequal quality.’ (Caplan, 2004, p.42)

Hayek in reference to the incentive problem stated that it does ‘not really touch the heart of the problem,’ and that besides the motivational difficulties it is about the capability of ends being reached. Without prices the choices between groups cannot actually be made as there needs to be a comparison between ‘alternative uses of scarce resources’ that prices offer. (Boettke, 2001, p.35) Whilst it is true that there is no way to confine investigation to
the lack of pricing in order to determine its particular severity, it can be made clear from
economic historians, previous planners and historical analysis which factors if any were
important. Boettke and Leeson (2005, p.1) responded to Caplan claiming that he
‘fundamentally misunderstands the Austrian proposition.’ Whilst agreeing with the
fundamental definition of socialism that it is ‘characterised by state ownership of the means
of production,’ (2005, p.3) they believe Caplan ignores socialism’s ends in which Mises
claims that socialism could not achieve its ends of the post-scarcity advanced society due to
the lack of market prices to allocate resources efficiently and would be used otherwise in
arbitrary and often less valuable ways. (2005, p.4) Boettke and Leeson following Caplan’s
claims for an empirical reality turned to the historical record of the Soviet Union in response
to the impossibility claims to isolate the extent to which the calculation and incentive
problem can be separately attributed. (2005, p.11) Whilst not seeking to see which
explanation is dominant, Boettke and Leeson defends the empirical relevance of the
calculation argument in a period of War Communism in Soviet Russia what he claims to be
‘real-world socialism,’ due to the extent of which nationalisation and centralisation had
occurred. (2005, p.12) Similarly China’s GLF is a period of extreme ideological, socialist
change in China that ended in disaster. This included policies of heavy nationalisation,
industrialisation and confiscation of grain surpluses from peasants.

Caplan’s (2004, p.41) statement that economic calculation previously did not exist before
the socialist revolution is a relevant observation of China that was mainly an agrarian
economy. However that is not to say however that China was a feudal nation void of
capitalism, Von Mises (1996, p.259) qualifies a capitalist economy by the existence of
market prices for capital goods; which he attributes as ‘the fundamental concept of
economic calculation, the foremost mental tool of the conduct...in the market economy.’
The use of double entry book keeping, a method of accounting is an apt indication of market
prices and a capitalist society, as Sombart claims they are ‘indissociably interconnected,’
with some scholars arguing that capitalism did not exist prior to its creation. (Chiapello &
Ding, 2005, p.3) The Double-entry bookkeeping in China had existed and evolved prior to
the nineteenth century around the late fifteenth and early sixteenth centuries. (Lin, 1992,
p.119) Pak et al (2005) explore the innovative double entry bookkeeping that was used by
firms in the early 20th century in order to calculate profit and loss and how it proved vital to
guiding Chinese proprietors. So it would not be appropriate to say that pre-Mao China was
void of calculation.

Case Selection

Following Boettke and Caplan’s claims for an empirical reality to be studied, the case
selection of China during the GLF must be examined. Boettke uses Russia’s period under war
communism as a prime case for examining the lack of prices and incentives as it came
closest to complete socialisation of the economy. This was undertaken at a time of civil war
in Russia that eventually led to a military victory for the Soviet red army. Boettke states that
if war communism as an experiment was ideological then socialism has much to explain in
terms of the results it had created. Many historians debate as to whether it was simply a
measure adopted to win the civil war. (Boettke, 2001, p.150) The GLF on the other hand was
a highly ideological pursuit and less so based on international/internal pressure that war communism faced due to civil war. The GLF was actively encouraged by the leadership in order to achieve their socialist ends. The “Three Red Banners” of the Chinese communist party served as the spark to the fanatical pursuit of communism, established during the ‘Eighth National Congress of the CCP in May 1958.’ These were the ‘general line, the Great Leap Forward and the people’s communes.’ (Jisheng, 2012, p.87) The general line referring to the directive of construction that was embodied in the GLF and the communes being one of its key ends through the replacement of private property with agrarian communes.

War Communism consisted of two major policy objectives: that the economic decision-making and concentration of industry was to be centralised and the substitution removal of the market economy in favour of a socialist economy. (Boettke, 2001, p.153) This transformation had mainly five principles of transformation to social organisation that included the elimination of private property, mobilization of workers through force, a centralized production and allocation of resources, introduction of distribution principles as attributed with socialism and the abolition ‘of commodity and money relations.’ (Boettke, 2001, p.92) The historian Carr described the soviet experiment as pure communism, away from market economics and was plagued with uncertainty as a ‘plunge into the unknown.’ (Boettke, 2001, p.81)

The destruction of private property in China is exemplified in the similar agricultural policy to that of the Soviet Union with the establishment of communes in 1958 and the confiscation of grain in order to subsidise the industrialisation process. As planners took over the economy, it was the farmers that lost control of their livelihood, their farms converted into communes that were often forcefully exploited for excess grain through use of force. (Dikotter, 2010, p.127) The communal movement was seen as a way to ‘embody ideals of political and economic equality,’ to each according to need and was believed to advance the pursuit of socialism with the introduction of work points to be distributed to teams. (O’Leary & Watson, 1983, p.594) ‘Material incentives and monetary rewards were rejected,’ free markets in the countryside were shut down and bonuses were eliminated from industry. (Naughton, 2007, p.69) The militarisation of the work force is epitomised in Mao’s statement that ‘everyone in our country is a soldier,’ dividing farmers among military lines into battalions, companies and platoons so as to deploy ‘troops in a continuous revolution,’ emphasising the extent of their mobilisation. (Dikotter, 2010, p.48) Industrialisation was the key goal for states as the gateway through which a post-scarcity socialist state would be created. In China the majority of private enterprises were taken under state control by 1952 the government took control of ‘all large factories and transportation and communication enterprises.’ (Naughton, 2007, p.59) This was part of a government campaign to intimidate and weaken commercial interests to secure state control. (Rosse, 1954, p.16) The political set up of both China and Russia are comparable too, with both one-party states with renowned ideological figureheads. This institutional design symbolised Lenin’s vanguard party guiding the proletariat towards socialism through the dictatorship of the proletariat. Under these conditions in which the socialisation of the economy removed a traditional market economy and radical social changes changed institutional arrangements (e.g. abolition of private property) it is a prime case to examine the impact that the lack of prices and the change in incentives incurred.
There are however a number of limitations to this essay, in particular the source material used when researching China’s modern socialist history. The party has not released all relevant documents relating to this period and the lack of transparency at the time makes first hand sources questionable. New documents have become available to help research the era with data available through numerous sources taken from archival evidence, qualitative, on the ground sources and interviews. However the quality of such research can be compromised. According to Ashton et al (1984, p.622) there have been attempts to eliminate false reporting through using contemporary surveys that ask for a multiyear recall, however even this in many cases is not enough for reliable information. A.K. Sen emphasises the lack of democratic openness, a free press or opposition parties played an important role in the lack of reliable information available from the period. (Ashton et al, 1984, p.632) From a theoretical standpoint a key limitation is the difficulty of untangling both knowledge problems and incentives to clarify the significance of either factor, with available historical data only allowing so much explanatory potential. Much of the knowledge and incentive debate is structured around the differing definitions of a socialist society and few cases provide strict theoretical examples of socialisation. Socialism has never truly reached its true ideological form, with the existence of false figures and socialist economies being shot with a ‘vast network of black markets and evasions of control.’ (Rothbard, 2006) In the GLF case the existence of joint public-private enterprises must be taken into account, however it still provides a prime case to examine the roles of knowledge and incentives.

China’s Great Leap Forward

‘Revolution is not a dinner party.’ (Mao Tse-tung, 1927)

The communists took over China in 1949 after the defeat of the Chinese Nationalist Party; the country was incredibly underdeveloped with nearly 90% of the population living in rural areas. (Yang & Li, 2005 p.844) Immediately there was a redistribution of land from the landlords to the peasantry. The Maoist regime was characterised as having features ‘of Stalinist autocracy with those of China’s traditional monarchy,’ (Jisheng, 2012, p.483) adapting features from the first Qin Emperor. As Jisheng stated in characterising the system ‘Mao’s rule was not just monarchy but totalitarianism‘ seeking to control all aspects of individual’s lives both economically and socially. (2012, p.484) The repression of all aspects of people’s lives was a distant reality from the utopian society of freedom that socialism had promised.

Instead of following the Stalinist approach, China would go its own path and ‘walk on two legs,’ which referred to the mobilisation of the peasant masses in order to transform both the agriculture and industry at the same time. (Dikotter, 2010, IX) Hua-yu Li (2006, p.185) in referring to the economic transformation of China comments that Mao abandoned the economic policy of 1949 that resembled a mixed economy which was pushed for by more moderate party members such as Liu Shaoqi arguing that industrialisation should be prior to any moves towards socialism. There was a long term commitment to the transformation to socialism and resembled much more like Lenin’s NEP that had elements of a market
The mid 1950’s was characterised by a high tide of socialist transformation pushed by a more radical segment of the party led by Mao Zedong, with market forces and material incentives replaced by ideology and spiritual incentives. (Hua-yu, 2006, p.186) The GLF characterised a period of economic transformation in China between the periods of 1958 and 1961. The plan of this campaign was the creation of a post-scarcity socialist state through the monopolisation of grain and nationalisation of industries that would create the capital for industrialisation to occur. The Chinese government expected a ‘great leap in agricultural productivity from collectivisation,’ whilst the government advanced an ‘aggressive industrialisation timetable.’ (Li & Yang, p.840, 2005)

There were a number of radical social and economic changes in the wake of and during the GLF. There was a national drive towards the state ownership of industry. All private banks and banking houses were nationalised, controlled by The People’s Bank of China that was established in 1949 (Yueh, 2010, p.136) All bank credit and insurance businesses including foreign exchanges were under state control. (Bowie, 1974, P.168) Tiny farms that existed prior to the socialist takeover of China were replaced by cooperatives, collective farms and then by people’s communes, each of these stages brought larger ‘agricultural planning units and more socialisation of the factors of production.’ (Walker, 1965, xiii) According to the eighth party congress in 1956, 91.7% of peasant households were in cooperatives and 90% of Individual handicraftsmen have joined producer cooperatives. In terms of industrial enterprises, by 1956 67.5% were owned by the state, and 32.5% were under joint public-private ownership. (Walker, 1965, xiii) The state came into ownership of practically all ‘railway lines, most of the iron and steel industries and other key sections of heavy industry and certain essential departments of light industry.’ (Bowie, 1974, P.169)

The totalitarian nature of the system meant that certain practices were prohibited. During the leap private markets were closed, with the introduction of the communes and the communal kitchens. The change from each according to merit to each according to needs meant that bonuses were taken away from workers and produce away from farmers. (Naughton, 2007, p.67) Further freedoms were prohibited from farmers with the restriction of choosing their own crops to plant. The goals of the GLF also meant an expansion of party dominance and bureaucratisation of the society, decisive in the structuring of economic choices in 1958 to 59. (Bachmann, 2006, p.7) The expansion of the party took the form of party cadres being put in charge of meeting output quotas in different regions. Party officials who often had minimal local knowledge chose the crops to be planted and how much to be expropriated. By late 1957 the key economic policy making bureaucracies generally defined the range of policy choice available.’ This included a significant partnership between planners and the heavy industry coalition. (Bachmann, 2006, p.8)

Grain and steel was seen as key foundations towards economic development that would occur through the mobilisation of the peasantry. A central issue for the socialist leadership was the question as to what extent should resources be extracted from the peasantry to support urbanisation and industrialisation. (Dikotter, 2010, p.16) The promise espoused through the Communist party was that the GLP would create abundance and its industrial achievements. In 1957 during the celebration of the October revolution this goal was realised and its proposed benefits included surpassing Great Britain in industrial production within ‘15 years and the United States in 20.’ (Li & Yang, p.841, 2005) The assumption that
the GLF would solve the problem of grain production meant there was a push for an urban population increase in order to fuel industrialisation. In 1957 the urban population was 99 million, within 2 years this increased to 130 million. (Bernstein, 1984, p.351) Resultantly it was a major concern of the government to feed this growing urban population that put a large strain on the demands of the rural population thus there was a reorganisation of the work and social organisation in order to speed up the creation of agricultural surpluses. (Kai et al, 2003, p.53) Planners often experienced tunnel vision in the implementation of their plans, with development given a priority there was scarcely thought given to other factors, thus why production became an end in itself. (Zhang, 2002, p.70) The production of factories was a sign of immediate progression and development. However, new plants are not proven to be useful by the fact that they exist or are creating goods. It depends also on the ‘general economic situation,’ and if the plants are meeting a demand and creating quality goods. (Hayek, 1935, p.204) However as long as the leaders assumed that the figures that they received were true and that the peasants had an abundance of grain, the procurement could be increased. Output became the end goal of campaigns such as during the backyard furnace movement, and there was a lack of return of physical and human capital that was due to the calculation ignorance, which led to planning errors. (Luo Gengmo, 1981, p.10)

Whilst the People’s Daily newspaper emphasised the ideological call in 1958 to ‘go all out and aim high,’ the reality of the combination of planning and incentive problems meant that there was nothing to be seen for people’s work. (Dikotter, 2010, p.15) The implementation of a procurement program in the countryside acted as a ‘tight bureaucratic straightjacket.’ (Bernstein, 1984, p.339) Production suffered as a result. Had the cost of the output obsession that existed been calculated or could be calculated the results would be terrible but it lacks the means to do such, lacking the boom and bust cycles associated with capitalism. (Dikotter, 2010, p.154) The resulting famine however is one of the worst losses of human life in history, with the death toll in the tens of millions. (Yang & Li, 2005, p.841) Between the years of 1958-61, grain production dropped by 15% in one year and then 25% for two further years. (Ashton et al, 1984, p.634) Hua-yu Li (2006, p.186) states that the GLF postponed China’s economic development for ‘at least a quarter of a century.’ Yang and Li (P.840) state that ‘61% of the decline in output is attributable to the policies of resource diversion and excessive procurement.’ The tragedy of the Chinese famine stems from mass redistribution of grain from the peasantry to industry. The initial lack of situational knowledge of the famine and political pride meant there was never an attempt to seek international relief; ‘it would not be inaccurate to say that 20 million people died prematurely as a result of errors of internal policy.’ (Ashton et al, 1984, p.634)

Incentives

By 1955 – 56 virtually the entire agricultural sector was reorganised into cooperatives; during the GLF these cooperatives merged into a People’s communes; large scale collectives with a ‘combination of governmental and economic functions,’ including mobilising labour. (Naughton, 2007, p.69) These communes were seen as the typical organisation for the transition to take place towards communism. (Zhang, 2002, p.70) The communes failed in a
number of regards, as those party cadres organising the communes were ill equipped, the farmer’s incentives were considerably weakened as personal income less directly reflected individual output and there was a discouragement of private plots and local markets were closed. (Ashton et al, 1984, p.625) Relations between the rural farmers and the communist leadership was not intended to be that of adversary, which was a central characteristic to the Stalinist regime but one of cooperation, at least in image. The Chinese revolution was based mainly on the peasantry; therefore the development of the countryside and industrialisation required ‘attentiveness to peasant incentives.’ (Bernstein, 1984, p.340) There was an expected increase in production from a range of social changes; the sector commune movement one of these key alterations. Previously peasants would have farmed their own segments of land with certain traditional forms of practice. Brought under party control, agricultural collectives were established that facilitated the sharing of animals and tools. This was pushed through in stages starting with mutual aid teams then elementary agricultural cooperatives. (Mirsky, 2009) The communal system sought to maximise the production capacity of the rural areas in order to fuel industrialisation in the construction of the socialist state.’ Whilst the communal scheme in agriculture and industry were to ensure equality, the result was often one of exploitation. Thaxton (2008, p.3) describes the people’s communes as a form of apartheid. Private property and local markets were banned and by 1958 private property was abolished and households were integrated into the state-operated communes. The collectivisation of resources also had an adverse effect on the peasantry due to the fact that farmers lost control over what they could harvest, including their land, harvest and schedules and what they could sell. The state bought grain from the farmers at a set rate to fuel industrialisation, however this as the local officials had to meet quotas and farmers were rarely left with enough for subsistence. (Dikotter, 2010, p.127)

Adam Smith (1776) in the Wealth of Nations stated that economic development could be achieved through the division of labour based on certain legal, economic and political institutions. Suggesting that it was the classical liberal night watchman state that was the key to growth, the GLF then could be viewed as completely devoid of these principles due to its totalitarian, socialist nature. That’s not to say that incentives did not exist within the socialist state: there was an incentive to meet quotas by party officials whilst other units of production were disregarded such as quality. From the outset the reasons for the failure of the GLF and the resulting famine seemed obvious with a combination of restrictions on economic and social freedom through ‘excessive procurement’ and a ‘reduction in productivity caused by collectivisation’, not to mention the bad weather effects. (Gonzalez, p.193) The incentive structure essentially collapsed due to the egalitarian nature of rationing and the redistribution of income according to need within the communes. Workers initially over consumed within communes that contributed to the shortage of grain, workers were not as incentivised to feed the commune as they were for their own families. (Kai et al, 2003, p.55) This had the effect of turning the production of goods from an economic question to that of a political one. (Wu Qungan 1986, p.29). 2010, IX) Peasants would seek to reduce their workload to a minimum due to collectivisation
policy whilst the planners would be incentivised to exaggerate output claims and production, to the point where economic planning came to be treated like a ‘fairy tale.’ (Joseph, 1986, 434) There was also some criticism from within the party aimed directly at the incentive problems that the social changes incurred. Peng Dehuai, the defence minister during the Lushan conference of 1959 warned that there were ‘winds of exaggeration,’ referring to the exaggeration of grain production along with the unfounded boasting of the leap. Peng was removed for his comments, due to running against the ideological vision of progress. This also led to the launch of an anti-rightist campaign. (Pantsov & Levine, 2013, pp.464-466)

Knowledge Problems

The failure of the communal system cannot be limited to the incentives of farmers and workers alone, albeit the untangling of incentives from knowledge through the available historical analysis is a significant task. The overall cost of planning is difficult to measure, even with many other factors taken into account. In particular as accountants ‘cooked the books,’ and there was a culture of ‘uncontrolled capital spending, enormous wastage, defective products, woeful labour discipline,’ among other things. (Dikotter, 2010, p.154) There is sufficient historical evidence however to suggest that the lack of prices was a substantial challenge during the GLF, affirming the Austrian school’s position on its importance. The unitary end or the utopian vision could only be achieved through the party’s centralised planned economy. This meant an ‘elimination of static and noise through construction of ‘uniform public opinion,,” referring to the abolition of social and economic freedom that Von Mises and Hayek believed to be crucial to a functioning and affluent society. (Jisheng, 2012, pp.485-487) As Naughton (2007, p.61) states planners struggled and “simply assigned ‘quantities’ and ignored ‘prices,’ the size and diversity of producers within China meant that planners could not coordinate the economy. The amateurishness and inability of the planners had an impact on all sectors of the economy, as there became large sectorial imbalances. Between 1957 and 1960 the industrial output ‘increased by 1.3 times...whereas the total value of agricultural output actually fell by 30%.’ This had the problem of also exacerbating imbalances in ‘accumulation and consumption in the distribution of national income,’ and also between supply and demand for basic goods, leading often to shortages in such items as clothes and food. (Joseph, 1986, 436) These imbalances emphasise the inability of the socialist regime to adjust to act in the similar vein of a market with prices.

Calculation errors can take place without anyone knowing that they occur, or even that an error was made at all. The inability of planning to calculate during the GLF is reinforced by Joseph’s (1986, p.424) statement’s that the origins of the GLF were due to ‘inexperience and arrogance,’ that was rife in the leadership of the CCP in the formulation of this second plan which in turn led to ‘excessive targets, commandism and boastfulness during the leap.’ The Resolution on Party history created by the eleventh central committee of the Chinese Communist party reinforces this by stating that there was a ‘lack of experience in socialist construction and inadequate understanding of the laws of economic development.’ (Joseph, 1986, 424) Post-Mao analysis commonly states that mistakes were down to optimism and
aspirations of ideology, these fantasies led to *incalculable losses and waste,* unable to adjust to new situational knowledge. (Joseph, 1986, p.425) Leaders followed aspirations rather than practical constraints and the resulting planning went to the detriment of the people who were exploited as a result. Shoddy economic planning introduced a ‘systemic risk.’ (Yang & Li, p.844) This systemic risk was only worsened by the fact that Mao’s rule was not just authoritarian but totalitarian, encompassing most aspects of people’s lives, meaning decisions made at the centre with an inability to calculate effected people nationwide therefore the knowledge problem worsened the famine situation. (Jisheng, 2012, p.484)

Mao had trouble receiving accurate information about the state of the country due to the systems feedback system. (Jisheng, 2012, p.497) Information was so skewed due to incentives and lack of necessary signals that in the midst of the famine Mao was so convinced by the information that he received from the planners within his party that he stated that the citizens should harvest less, and said *‘people in china on average cultivate three mu but I think that two mu is enough.’* (Dikotter, 2010, p.135) This emphasises the role of the knowledge problem in planning and the inability as a result of leaders to adapt and create optimum incentives. Large projects were generally poorly planned and executed having a major human and economic cost, such as the irrigation works that required mass mobilisation and ended in mass suffering, which, of course, would have led to further calorific shortages and undernourishment. As a report on irrigation stated, moving ‘30 billion cubic metres...30,000 people will die.’ These projects were often known as the killing fields due to their impact on villagers. (Dikotter, 2010, p.33) The water projects had a large conservancy agenda to expand ‘irrigated acreage,’ that required extensive mobilisation often taking up between 30 – 50% of the workforce. Such diversion of resources has been estimated to account for 28.6% of the grain output collapse. (Kai et al, 2003, p.54) The results of projects such as these reiterate the difficulties faced by planners in gauging decisions without prices, lacking the knowledge to do so effectively. By the end of 1958, the communist leadership found themselves “unable to set priorities and make real decisions.” (Teiwes & Sun, 1998, p.136) Whilst calling for a decentralisation of decision-making, Mao was key to setting targets through his central plan describing the ‘whole nation as a chessboard.’ (Teiwes & Sun, 1998, p.141-144) In early 1959 it was Mao himself that criticised the reality of the GLF due to its similarities with squeezing the peasants in Russia, which did not come from an active dislike or punishment of them but pushing an ideological agenda with ambitious development goals with no economic reality attached. (Bernstein, 1984, p.342) Mao believed at this stage that the increased production and redistributive measures that would be put in place that there would be an adequate supply of food, refuting any concerns about food supplies. (Ashton et al, 1984, P.624) As Kai et al state (2003, p.55) the ratio of procurement remained high even after problems had become known in 1960, reinforcing the inability of the system to adapt to informational changes. (Yang and Li, 2005, p.842)

The excessive amount of procurement was a result of regime misjudgements, rather than a deliberate policy. The absence of internal critique of the Maoist regime and a lack of oppositional media to report on failures meant that finding the right policy solutions was always going to be difficult, the unitary planning of the party lacked the ability to conform to new information. At the time of occurrence, official blame for the event had been put down
to ‘rightist sabotage,’ which only added to a worsening situation. (Chang et al, 2005, p.435)

The hundred flowers campaign that encouraged internal debate was followed by an anti-rightist campaign to hush oppositional voices, with those raising opposition being purged, serving to skewer the information feedback system even further. As it attempted to cover the cracks the reality was coming clear that the socialist state would not be ‘viable in the long run in a dynamic international capitalist environment,’ (Ellman, 2009, p.32)

The backyard furnace campaign is a key example as to why knowledge contributed significantly to the failure of the GLF. The backyard furnace movement was a planning disaster as ‘pots, pans and tools’ were thrown into backyard furnaces in order to increase the yield. (Dikotter, 2010, p.xi) Whilst there was a problem of low quality tools being produced by the substandard iron that was being created, many tools that were of a decent level of quality were often devoured in order to meet quotas. (Dikotter, 2010, p.144) This emphasises that without the availability of prices, the planner is unable to make a judgement as to the best utilization of his scarce resources and unknown to him what he is giving up as a result. (Von Mises, 1990, p.26) The backyard furnace campaign also reinforces Martin’s (2010) statements that the lack of a tight feedback mechanism as market prices provide meant a failure to meet to recognise errors and appropriate changes. The resulting scenario meant that the output was not only lacking but goods were of a poor standard. Within industry there was a problem with the conditions of tools and factories that led to a culture of waste. This developed due to the poor allocation of supplies and resources but also bosses and party officials trying to meet outputs that often meant bending the rules and cutting corners. (Dikotter, 2010, p.146) Awards were based on production rather than quality in place of a price mechanism, thus the substitutes for profits were arbitrary. There was no reliable value measure of the ‘gain or loss generated by the plant,’ a knowledge problem emerged, affirming the Austrian school’s position. (Gonzalez, 2008, p.192) Planners weren’t just producing fewer goods however they had little feedback to prove they were producing the wrong goods. Strict adherence to plans lead to factories decreasing the quality of their goods as they tried to keep up with party’s quotas. Even goods that were produced often lay uncollected as they were made to a sub-par standard and had nowhere to go due to the crippled transportation system. (Dikotter, 2010, p.138) State storage and distribution played a large part to the destruction of grain. This was mainly due to the rigid patterns of planning with employees being told to transport goods to various locations. Reports state that ‘just outside the capital, in the middle of the worst year of the famine, well over 50 tonnes of sweet potatoes decayed in a dozen villages in Yanqing county.’ (Dikotter, 2010, p.137) One of the key errors that took place was in the nature of the transport system, in particular the railway system that was paralysed due to the extent that goods were to be directed from one side of the country to another. (Dikotter, 2010, p.138)

A display of the lacking knowledge and limitations of party officials in executing their plans and the results of lacking signals in order to adapt to certain circumstances. The heavy emphasis on non-agricultural activities led to neglect for the harvest, the drive in particular for steel, led to a lack of labour to gather the harvest. This impacted the lives of the people who were left with little to eat by 1959. (Ashton et al, 1984, p.625) Even in other industries such as the fishing trade, boats and nets were poorly maintained by the state and thus many workers could not continue or chose not to continue. Coupled with little incentives to repair tools that ‘belonged to everybody in general and nobody in particular.’ (Dikotter, 210, pp.143-144) In many cases quotas were simply made up with little research being done on
the land, a lack of local farming knowledge contributed as a result to the famine. (Dikotter, 2010, p.128)

It appears that the effect of this blind ideological pursuit replaced any scientific basis from which to design the economy and led to the pursuit of agrarian socialism, seeing the peasantry as potential to replace the modern proletariat, leading to disaster. (Joseph, 1986, p.430) Farmers did not have the choice of what grain to grow, and some communes were unprofitable as a result. The abolition of private property enforced the socialist ideology and it came at great economic risk due to its functional importance such as the legal clarity it provides, the motivational aspect due to responsible decision making, the possibility of innovation through experimentation and allowing the basis for economic calculation. (Boettke, 2001, p.241) This was a consequence of centralised plans of meeting export quotas and did not reflect the wishes of the individual farmer, worsening the famine situation. Especially as cotton began to be treated as a profitable plant to export, 82% to 90% of the crop ended up in state hands to be sold. There was an order of importance from which goods were to be allocated with the army and the party taking the front, followed by the urban population. The actual producers of the cotton, the rural population were generally excluded from such rationing thus they were left with minimal allocation. (Dikotter, 2010, p.140) Planning had a detrimental social and economic impact worsened due to industrialisation and the export-focused economy. Applying many of the ideas of the planners and party members to reality had unexpected and often adverse results. The negative effects of government campaigns were compounded through certain interventions in the economy such as the great sparrow campaign that in particular ordered the elimination of the pests of rats, flies, mosquitoes and sparrows to stem the eating of grain seeds, specifically the sparrow came to near extinction. (Shapiro, 2001) The attempted extermination of the sparrow had the effect of increasing crop-eating insects such as the locust to thrive contributing to the opposite of what they were trying to achieve and with the fall in crop yield, the famine followed. Ironically suggesting the Austrian criticisms of socialist economic principles may also apply to central environmental controls. North China had been frequently afflicted by catastrophic drought and flooding at different times of the year, which contributed to the reduction in food production but campaigns such as these emphasised the tragedy.

Conclusion

Mao’s critique of capitalist society laid the basis for his envisioned future socialist society paving the way to the high tide of socialism during the 1950s and the GLF. The replacement of the market economy with a command economy, the removal of private property and nationalisation of industries were steps towards the realisation of his socialist ideology. This was characterised by a strict rationalisation of distribution seen as a necessity in order to meet its ends. Mao’s own vision of socialism however ended in disaster and as Joseph (1986, pp.444-445) states the implications comes from a “rigid pattern” dictated by dogmatic definition, in the case of China it was adherence to strict agrarian socialist ideology. The leadership were blinded from their own ‘ideological fervour’ following the
breakdown of their statistical ‘eyes and ears.’ (Naughton, 2007, p.70) This is not to say that structural deficits were the only cause of the great famine, bad weather certainly played a part however this is somewhat overshadowed in relation to the systemic obstacles that the communist party introduced, which played a much greater role in the famines creation due to the introduction of ‘fairy tale,’ economics. (Joseph, 1986, p.434)

The GLF was a disaster and from the evidence the reasoning for this reflects a combination of both incentives and a lack of prices. Caplan was correct in stressing the importance of incentives as an issue for socialist economies. It is now widely recognised that the establishment of communes, widespread collectivisation and communal kitchens had an adverse effect on the incentives of workers. Incorrect information from radical social and economic changes fuelled planning judgements that set outputs unreasonably high. Local party cadres were given the power to create and meet quotas to keep the system in check. (Luo Gengmo, 1981, p.10) However through systemic pressures they were incentivised to exaggerate quotas and therefore were often based off no rational, relevant knowledge however on ideological pursuit.

Caplan claims that history does nothing to show economic calculation was the difficulty facing socialist economies and that there was no instance where it was the sole problem. He argues that this is further obscured, as calculation hadn’t generally taken root in the agrarian socialist societies prior to socialisation. (2004, p.49) Whilst it is true that historical analysis limits the ability to show calculation as a sole problem, the clarity between knowledge and incentives is convoluted as the Chinese case study supports and the evidence of double entry bookkeeping supports that calculation had existed prior to the socialisation of society. There is a convoluted relationship between knowledge and incentives that means that they cannot be separated as simply as Caplan suggests. (Gonzalez, 2008, p.191) The empirical evidence support Boettke’s position and that of the Austrian school, for example the planning failures such as the backyard furnace campaign. (Gonzalez, 2008, p.191) The evidence emphasise the limitations of the Chinese government to process information and opportunity cost due to the creation of faulty goods and the inability to react or change appropriately due to the lack of price signals, relying instead on the skewed knowledge of local party officials.

This obsession with the leap into a post-scarcity socialist society that the GLF undertook is confirming of Von Mises’ warnings of ‘glamorous pictures painted by the utopians,’ of economics that omit ‘to show how this miracle is to take place.’ (1990, p.2) The drive for peasants to move towards industrialisation through heavy capital investments led to planning disasters, with many taken off the farm and placed into industrialisation projects during the famine. Knowledge clearly could not be put to good use, for example in the agrarian communes party cadres with little farming knowledge were given overwhelming power combined with an incentive to exaggerate claims, leading to disastrous results. (Dikotter, 2010, p.135) This skewed information informed the leadership who were often wholly unaware of the terrible situation on the ground, a result of the lacking feedback mechanism that the lack of prices incurs and the lack of corrective mechanisms with local officials reluctant to tell the truth. Whilst this still emphasises the role of incentives, evidence even suggests that leadership were slow to act appropriately when the problems
were realised, reinforcing the inefficient feedback system that socialism entails regardless of incentives. (Yang and Li, 2005, p.842)

The planning leadership lacked the ability to adapt to new knowledge in order to transform the socio-economic conditions for optimum incentives. This meant the utter collapse of the attempts to abide strictly to ideology, leading to a new economic policy. The Great Leap Forward was followed by a significant change of direction as private plots were reinstated, individuals were more rewarded for their efforts rather than based on needs and a more mixed approach assumed with a suspension on construction. (Jones & Poleman, 1962, p.14-16) To assume the creation of a socialist man would have ridden the command economy of its problems is a fallacy. As Ellman (2009, p.22) states, the plan and outcome between sectors differed substantially, and with an inability to match the capitalist system’s price system, socialist planning was in fact “very wasteful and unable to abolish the ‘anarchy of production.’” Whilst not addressing the impossibility question, this essay helps provide evidence for its answer. Assuming higher incentives would not have ended the problems for the Chinese socialist state, introducing market forces however certainly would have mitigated historical circumstances.
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