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The Olympic Bid Cycle as a form of irrational investing: An application of Minskyian theory

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Abstract: Host city bidding for the Olympic Games appears to constitute a form of pro-cyclical irrational investing that leads to multi-billion dollar economic and financial shortfalls and budget over-runs with 100% consistency. The utilisation of Minsky's Financial Instability Hypothesis (FIH) and Credit Cycle to the Olympic Bid Cycle sheds valuable light on the irrationality of these practices, highlighting a move from stable (hedge) to unstable (speculative) and unsustainable, precarious (ponzi) financing over the life-cycle of an Olympic bid. Application of Minskyian theory to the Olympic Bid Cycle carries important insights for practitioners and policy-makers, extends the analysis of Olympic-Games studies to the post-Classical economics realm, and addresses a wider theoretical call for the utilisation of Minskyian theory outside of a financial markets context. The article concludes with recommendations for further research.

Subjects: Sports and Leisure; Behavioral Sciences; Economics, Finance, Business & Industry

Keywords: Minsky; Olympic Games; irrational investing; behavioural finance; Ponzi financing, hedge financing, speculative financing, Minsky's Credit Cycle; Minsky's financial instability hypothesis; 2008 financial crisis

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Dr Chris Mackintosh is a senior lecturer at Manchester Metropolitan University Business School. Chris has undertaken, managed or commissioned over 100 external research projects in the field of sport policy and has led projects for many major national sports agencies, including Sport England, Sport Wales, Street Games and the Sport and Recreation Alliance. Dr Mackinstosh was awarded a PhD from Liverpool John Moores University in 2016.

PUBLIC INTEREST STATEMENT

The Olympic Games could be considered the greatest show on earth, bringing the very best of sport to a global audience, inspiring us to be the best we can be through the communication of Olympic ideals, and engendering national pride as we stand behind our athletes in their journey from event to podium. Yet Olympic Games always overrun (often by $billions), with an amazing 100% consistency. Legacy goals and projected increases in tourism revenue usually fail to materialise, leaving taxpayers responsible for significant financial bailouts, which in turn carry the potential to negatively impact our economies. So why do host cities continue to bid, despite the economic and financial risks that hosting the Olympic Games entails? Minskyian theory sheds valuable light on this compelling and relevant phenomenon, offering fascinating and pragmatic insights into this practice and providing recommendations for future policy and research in this area.

1. Introduction

> When speculative positions must be financed, the terms on which they are refinanced may be unsustainable … but it is still better to refinance, and defer the day of reckoning, than to admit defeat. (Galbraith & Sastre, 2009, p. 1)

The process of bidding for, and hosting the Games (referred to in this article as the *Olympic Bid Cycle*[1]), appears to constitute a form of pro-cyclical irrational investing that leads to multi-billion dollar economic and financial shortfalls and budgeting overruns (Flyvbjerg & Stewart, 2012). For example, a recent University of Oxford study into the cost over-runs of hosting the Olympic Games from 1960 to 2012 (Flyvbjerg & Stewart, 2012) concluded that hosting the Olympic Games ran over budget for host nations with 100% consistency. The average over-run of host city bids was reported to be 179% (324% in nominal terms), meaning that Olympic host-city bidding could reasonably be theorised to constitute one of the most financially risky mega-projects that a government and host city could choose to financially pursue. Why, then, do host cities continue to bid?

Minskyian theory has enjoyed a considerable resurgence of interest in a post-2008 world, given its efficacious contribution to the study of irrational investing (1975, 1986, 1996), and it has much to add to an understanding of the schism that emerges consistently between initial and final Olympic host city bid figures and the consistent failure to achieve beneficial economic outcomes for host nations as a result of hosting the Games. Situating Olympic hosting as a form of irrational investing carries genuinely valuable insights for practitioners and policy makers, as it allows the process of Olympic bidding to be analysed more extensively via the utilisation of post-Classical economics approaches. Furthermore, it addresses Galbraith's call for such engagement; "There is nothing that restricts the application of Minsky's insight to the pecuniary realm. It is therefore astonishing how little has been done to extend the basic conceptual framework to other areas of social science" (Galbraith and Sastre, in Papadimitriou & Wray, 2011, p. 263).[2] Utilisation of a generalized use of Minsky's theories subsequently provides a solid argument for the conceptualisation of Olympic bidding as an act of irrational investing.

2. Irrational investing

The foundations of studies of irrational investing can be traced to what Alan Greenspan termed "irrational exuberance",[3] and in what John Maynard Keynes referred to as "animal spirits".[4] First addressed by the Scot Charles MacKay in the seminal 1841, *Extraordinary Popular Delusions and the Madness of Crowds* (1841/1980), the study of irrational investing has emerged with strength in the relatively youthful academic field of behavioural finance,[5] which has been referred to as "perhaps the most important conceptual innovation in economics over the last thirty years" (Schleifer, 2012, p. 1). Behavioural finance challenges the efficient markets hypothesis by instead attributing much of the volatility and anomalies in the market to cognitive bias (for example, belief perseverance, where agents persevere an outcome dogmatically even when presented with evidence to support the irrationality of this act (Zehndorfer, 2015, p. 78)) and "herding" (emotionally following the crowd, as opposed to utilising empirical data, to make ones investing decisions), which can also be seen to occur in the engagement with hosting of mega events (Banerjee, 1992; cited in Rose & Spiegel, 2011).

3. Minskyian theory

Minsky's Financial Instability Hypothesis (FIH) adds substantially to the post-classical economics field, arguing that crises do not occur as a result of market imperfections or exogenous shocks, but instead as a result of an inherently endogenous "boom-and-bust" pro-cyclicality of the market. The work of John Maynard Keynes significantly influenced Minsky, as did Schumpeter's "creative destruction"—a cyclical theory of speculative waves and debt deflation that occurred as a natural feature of capitalist economies (Minsky, 1975, 1982, 1986, 1996). Minskyian theory offers a fascinating insight into the pro-cyclicality of irrational investing in Olympic Bid Cycles, the discussion of which forms the remainder of this article. For the benefit of the reader, Minsky's Credit Cycle (Figure 1, utilis-

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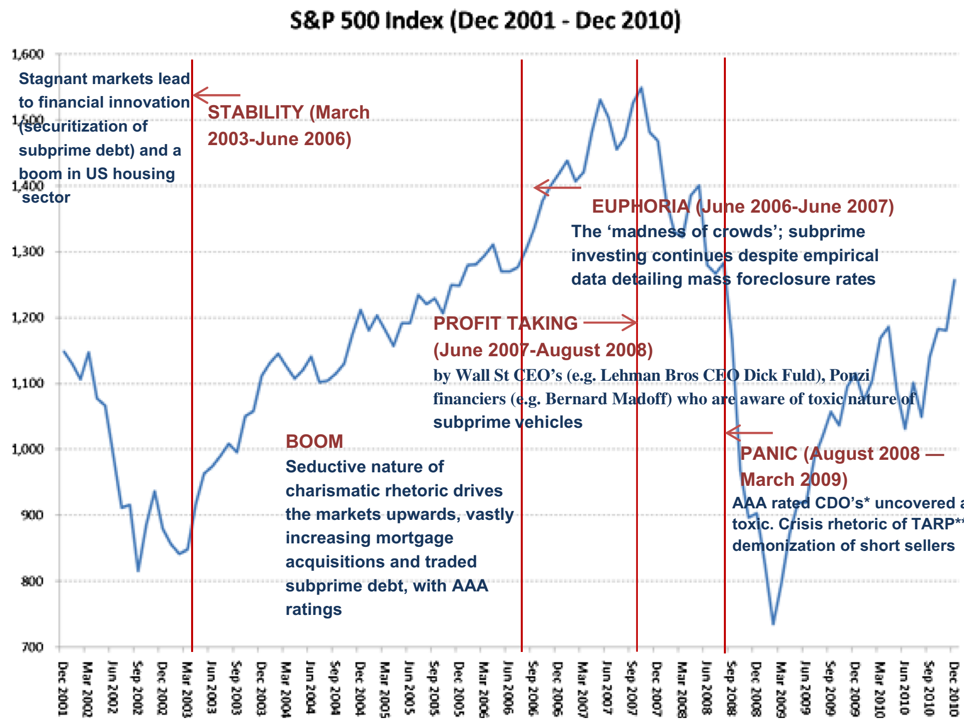

Figure 1. Charisma and the 2008 financial crisis.

*Collateralized debt obligations; **Troubled asset relief program.

ing the 2008 financial crisis as a case study), is subsequently represented in Figure 1, before being applied to each stage of the Olympic Bid Cycle.

Minsky identified a taxonomy of financial structures, or units, explaining that during a period of financial calm (see Figure 1, "Stability"), and within a robust financial environment, borrowers are, for the most part, able to settle the principal and interest payments on outstanding loans ("hedge" units). As the presence of profit opportunity leads to new activities and innovations (in the case of the 2008 financial crisis, securitization of subprime debt: "boom" and "euphoria" phases of Minsky's Cycle), further stimulating growth, agents become less risk-averse and likely to take on more debt, increasing speculative positions. At this point, many "hedge" units become "speculative", where their indebtedness means that their cash flow would enable them to service only the interest on a loan.

Speculative behaviour predisposes an economy to greater investment and growth, but requires taking on significantly higher levels of debt in order to facilitate that growth. Interestingly, speculative behaviour is rife in the Olympic Bid process. For example, Flyvbjerg and Stewart (2012) reported that bid versus actual spend data was also not available for 11 of the Games studied: "From a rational point of view such learning would appear to be a self-evident objective for billion-dollar events like these, but it is not for the Olympics" (Flyvbjerg & Stewart, 2012, p. 10). A culture of speculative investment in the Olympic Bid Cycle process has enabled a culture of under-bidding, accompanied by the failure to recognise historic losses in bid budgets. Secured by Government guarantees, Olympic bids tend to end with the inevitable taxpayer-funded bailouts (similarly to the post-2008 bank bailouts) as budgets have simply moved too far from fundamentals to secure a coherent and realistic profit.

At this point, many "speculative" financing units have become "Ponzi"[6] financial structures, where interest payments alone exceed the units' cash flow, leading to refinancing or liquidation and/or taxpayer-funded bailouts (e.g. Montreal's 1976 Olympic Games where the cost overrun reached 796%). At this point, the economy has become inherently fragile with recession, debt deflation and a possible economic depression all realistic outcomes in the advent of a shock of some kind (for example unexpected asset price inflation): in the case of Montreal, taxpayers were left with a

30-year tax bill. In the case of the 2004 Athens Games, €7bn of the eventual €9bn Euro cost of the Games was funded by Greek taxpayers. Sadly, a year later, Greece became the first EU country to be placed under fiscal monitoring by the EU, with Greece's 2004 deficit standing at 6.1% of GDP, a figure that stood in excess of twice the EU limit (Malkoutzis, 2012). Certainly, the cost of the Games was a significant contributor to the countrys' economic malaise.

4. The Olympic Bid Cycle: From Hedge to Ponzi financing

In terms of financing, the key stages of an Olympic Bid Cycle mimic those of a financial markets boom-and-bust scenario, with Minsky's Financial Instability Hypothesis & Credit Cycle offering fascinating insight into the shift from hedge to Ponzi financing that has historically taken place throughout the life cycle of Olympic bids. First, the *displacement* phase creates an exogenous "shock" or displacement, with the IOC's announcement of the opening of the Olympic bid process. As the Bid Cycle moves through *boom & euphoria* stages, the securitisation of public sentiment, necessary for any Bid, is heightened through charismatic rhetoric and a Government-guaranteed conservative (yet inaccurate—and thus, speculative) budget that forecasts a significant post-Games economic legacy. At this point, budgeting decisions move from hedge to speculation, with budgets exponentially rising as the Bid Cycle progresses. At the peak of the Olympic Bid Cycle—the hosting of the Games, public sentiment is highest, with *profit taking* in emergence (sponsorship income, corruption, continuance of strategic under-bid activity). *Panic* then ensues post-Games, when the extent of financial misrepresentation of the budget at Bid stage becomes evident, and the shift to Ponzi-financing necessitates a taxpayer-funded bailout.

5. Displacement: The bid process opens

In macroeconomic terms, a displacement can be viewed in the context of an Olympic Bid Cycle as a "demand shock" (Kasimati & Dawson, 2009, p. 140); or, as conceptualised, through the lens of Minsky's Credit Cycle, the exogenous "shock" or event common to Kindleberger's conceptualization of market bubbles (Kindleberger, 2000). This constitutes the first stage of the Cycle.

In the context of host city bidding for the Olympic Games, this takes the form of the announcement of the bid process by the IOC to which host cities submit Candidature Files. As stated by Rose and Spiegel (2011), bidding for the Games signals "that the country is capable and willing to host the Olympics through a highly visible international bid for a mega-event … Indeed, the effect of sending this signal seems broadly comparable to size in actually hosting the Games" (p. 666). This positive economic impact partly explains a decision to announce ones' candidacy. However, any positive economic effects—most notably increases in exports and overall trade—that are associated with hosting the Games are evident at the bidding phase only (Rose & Spiegel, 2011)-a fact evident by Olympic Games impact reports. Why, then, do candidates choose to proceed beyond an initial candidature phase? An answer lies in the strategic benefit to nation states of hosting the Games.

As Galbraith (1961) stated, in the context of the pre-2008 crash housing boom, "The mass escape into make-believe, so much a part of the true speculative orgy, started in earnest. It was still necessary to reassure those who required some tie, however tenuous, to reality. And […] the process of reassurance—of inventing the industrial equivalents of the Florida climate-eventually achieved the status of a profession" (pp. 16–17). Similarly, the repeated practice of Governments in acting as guarantors for multi-$m Olympic Games bids, in the absence of a coherent and persuasive economic rationale for doing so and with empirical data indicating clearly the likelihood of under-bids and economic indebtedness points to a clear case of irrational investing.

It also explains why charismatic rhetoric has played such an emergent role in Games bids. The use of sport as a political tool is well documented; as an opiate, a tool for nationalism, a vehicle for social change, a vehicle for propaganda, and a promotional tool for politics (Eitzen & Sage, 2009) and it is fair to say that charismatic rhetoric, symbolism and imagery has, historically, played a central role in the Olympic Bid Cycle. Guttmann (1986, p. 179) argues that governments "collect political prestige by staging extravagant sport spectacles" such as the Olympic Games and "bask in the reflected glory

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of athletic achievement". The presence of powerful agents with objectives such as these generally lead to the emergence of corruption, misrepresentation of financial data and other malfeasant acts which tend to emerge later in the Cycle (see *Profit taking* in Section 7).

Hosting the Games constitutes a political show of strength that requires public endorsement and, consequently, strategic underbidding in order that the Bid Cycle might move from the *displacement* (opening of the bid process by the IOC) to *euphoria* phase (the securing of public support). If "it is the economic value accruing to the host that is commonly used as the basis for gathering public backing for such events" (Lee & Taylor, 2005, p. 595), then it is reasonable to theorise that underbidding (often by $billions) constitutes a strategic decision at early candidature Olympic Bid Cycle stages, in part to secure and stoke public acceptance of, and euphoria toward, the Games bid (Cashman, 2003). This would contribute to the emergence of *profit taking* behaviour during latter stages of the Bid Cycle.

6. Euphoria

The run-up to the 2008 global financial crisis was referred to as "a classic delusion, a madness of crowds. We've lived through it over and over again".[7] The central role of charisma in fuelling the flames of irrational investing actually emerges with some strength[8]; for example, Weber (1978) seminal view that those who "have a share in charisma must inevitably turn away from the world" (Weber, 1978, pp. 1113–1114). Certainly, it is a commodity relied upon substantially throughout the history of Olympic bids.

Utilisation of charismatic rhetoric and imagery at this stage of the Olympic Bid Cycle is necessary (i.e. references to history and tradition, emphasis on a collective identity, reinforcement of a collective efficacy, a focus on the leaders' similarity to followers, discussion of values and morals, references to hope and faith and appeals to the self-efficacy of followers (Davis & Gardner, 2012, p. 919)) in order to continue to engender public support. By this point, the Olympic Bid Cycle has moved from displacement to a peak of euphoria, with vast budgetary increases leading to a move from hedge to speculative, and potentially, Ponzi financing. For example, all post-1984 Olympic Games (i.e. post-commercialization) led to major taxpayer funded shortfalls: the $1.9bn 2002 Salt Lake City Games were 80% funded by taxpayer, the $1.23bn 2010 Vancouver Games cost the taxpayer $1.23bn, and the London 2012 Games created a $14bn deficit.

7. Profit taking

As stated by Kindleberger and Aliber (2005), "the implosion of an asset bubble always leads to the discovery of fraud and swindles" (p. 143). *Profit taking* carries historic precedent within the context of the Olympic Games—for example, the recent arrest of multiple Kenyan high-ranking officials who are alleged to have stolen in excess of £6m of equipment and athletes' expenses earmarked for the Rio 2016 Summer Olympic Games, the votes-for-sale scandal involving Bulgarian IOC member Ivan Slavkov and bidding for the 2012 Summer Games (uncovered by Panorama reporters) and the extensive bribery and corruption that surrounded the Salt Lake City Organizing Committee in relation to their bid to host the 2002 Winter Games.

It has been argued that decisions to host the Games must reflect decisions taken "out of naivety or self-interest" (Rose & Spiegel, 2011, p. 652), particularly given the negative economic impact that have arisen from hosting the Games (Owen, 2005). It could therefore reasonable be theorised that hosting the Olympic Games was a decision often taken in self-interest: that is, to serve the political or financial interests of a political party or leader, or of key sponsors or financial backers (ultimately at significant cost to the taxpayer). It could not, presumably, constitute a position taken out of naivety, given the wealth of empirical data available to potential bidders that identifies, historically, the negative economic and financial ramifications of hosting the Games. As a result, one might reasonable theorise that strategic under-bidding for the Games represents a form of *profit taking* at the earliest stages of the Bid process, as it represents a conscious decision to misrepresent financial indebtedness to taxpayers.

8. Panic

In the words of Warren Buffett,[9] "Only when the tide goes out do you see who's been swimming naked". When an asset bubble bursts, it constitutes that moment where CEO's, fund managers, and individuals involved in fraudulent, incompetent, insufficiently transparent or malfeasant activity (e.g. Bernard Madoff, former NASDAQ-Chairman and architect of a multi-$bn Ponzi scheme) face being stripped of their power.[10] The turning of the tide from euphoria to panic, when an Olympic Bid Cycle reaches "win" and post-Games stage, is evident when Games budgets rise inexorably, when post-Legacy promises fail to materialise and when public funds become strained in a bid to meet Games-related targets: "We dismiss as implausible the idea that economic fundamentals (e.g. transport infrastructure) relevant for trade have been improved by both hosts and unsuccessful candidates alike during the run-up to a serious Olympic bid" (Rose & Spiegel, 2011, p. 667).

9. Summary

Entering into an Olympic Bid Cycle appears to constitute a form of irrational investing that leads to economic and financial shortfalls and overruns with 100% consistency (Flyvbjerg & Stewart, 2012). Hosting the Olympic Games constitutes an act of irrational investing by host nations, given that it historically requires a shift from hedge, to Ponzi financing, because it relies heavily on the use of charismatic rhetoric for the public to support it, and because a wealth of empirical data supports the notion that it will lead to negative economic consequences for taxpayers.

In addressing the earlier-cited critiques of Galbraith and Sastre (in Papadimitriou & Wray, 2011, p. 263), this article identifies the way in which Minsky's theories hold significant value for the study of Olympic host city bidding. This article ultimately represents the first application of post-classical economics theories to the study of Olympic host city bidding as an irrational act of investing, utilising charismatic theory as a further tool of analysis. Ultimately, it provides a salient argument for the conceptualisation of Olympic Games bidding as a form of irrational investing, and for the application of Minskyian[11] theories to the process as a means of shedding further light on the pro-cyclical shifts from hedge to Ponzi-financing that take place throughout an Olympic Bid Cycle.

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Notes

1. Cycle refers to the lifecycle of the bid, from initial bid announcement stage to post-Games stage.
2. The authors discuss the need for a "generalized Minsky moment" that takes key conceptual components of the theory—such as the notion that "stability is destabilizing" and applies these components in a broad way to other fields, such as international relations. Utilization of Minsky's theory is thus undertaken using a "generalized" approach of this nature.
3. A term coined by Alan Greenspan in a 1996 speech entitled "The Challenge of Central Banking in a Democratic Society".
4. A term created by economist John Maynard Keynes in his seminal 1936 work The General Theory of Employment, Interest and Money. Macmillan Cambridge University Press, for Royal Economic Society in 1936.
5. Behavioural finance can be defined as the analysis of what happens when agents fail to act rationally, fail to incorporate new information into their behaviour, or make choices that are not rationally consistent with maximizing expected utility (Barberis & Thaler, 2002, p. 2).
6. Minsky identified a taxonomy of financial structures, or units, explaining that during a period of financial calm, within a robust financial environment, borrowers are, for the most part, able to settle the principal and interest payments on outstanding loans. He referred to this as "hedge" units. As the presence of profit opportunity leads to new activities and innovations, further stimulating growth, agents become less risk averse and likely to take on more debt, increasing speculative positions. At this point, many "hedge" units become "speculative", where their indebtedness means that their cash flow enables repayment of the interest on loans but not of the principal. Speculative behaviour predisposes an economy to greater investment and growth (and, thus, indebtedness to finance such growth) leading to ultra-speculative behaviour as the economic boom becomes a bubble. This leads many "speculative" financing units to become "Ponzi" financial structures, where interest payments alone exceed the units' cash flow, leading to refinancing or liquidation. The economy has become inherently fragile and may result in an economic recession, debt deflation, and, possible economic depression in the advent of a shock of some kind (for example unexpected asset price inflation). The excessively leverage of Bear Stearns (40:1), Merrill Lynch (32:1), Morgan Stanley (33:1) and Citi (33:1) in 2008 and the banks inability to meet capital requirements following the subprime bust provide an excellent example of such Ponzi financing and the dangers inherent to it. "...

capitalism is inherently flawed, being prone to booms, crises and depressions. This instability, in my view, is due to characteristics the financial system must possess if it is to be consistent with full-blown capitalism" (Minsky, 1982, p. 278).

7. CEOs and Market Woes: Is Poor Corporate Governance to Blame? Wharton University of Pennsylvania, December 10th, 2008: Accessed at: http://knowledge.wharton.upenn.edu/article/ceos-and-market-woes-is-poor-corporate-governance-to-blame/.
8. A concept explored at length by the first author of this article, to which the reader is directed for further elucidation (Zehndorfer, 2015).
9. Warren Buffett, CEO of Berkshire Hathaway and one of the world's most success investors.
10. NB. Ponzi financing in Minsky's parlance is not an illegal act, whereas in the case of "Ponzi schemes" the term denotes fraud.
11. Minsky's (and other behavioural finance and post-Keynesian institutionalist—i.e. post-classical economics).

Corrigendum

This article was originally published with errors. This version has been corrected. Please see Corrigendum (http://dx.doi.org/10.1080/23311886.2017.1320845).

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