





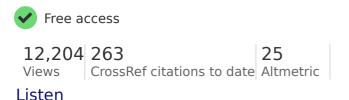


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The Journal of Peasant Studies >

Volume 41, 2014 - Issue 5: Global Agrarian Transformations Volume 1: New Directions in Political **Economy**



Articles

'Like gold with yield': evolving intersections between farmland and finance



Abstract

Since 2007, capital markets have acquired a newfound interest in agricultural land as a portfolio investment. This phenomenon is examined through the theoretical lens of financialization. On the surface the trend resembles a sort of financialization in reverse - many new investments involve agricultural production in addition to land ownership. Farmland also fits well into current financial discourses, which emphasize getting the right kind of exposure to long-term agricultural trends and 'value investing' in genuinely productive companies. However, capital markets' current affinity for farmland also represents significant continuity with the financialization era, particularly in the treatment of land as a financial asset. Capital gains are central to current farmland investments, both as a source of inflation hedging growth and of potentially large speculative profits. New types of farmland investment management organizations

(FIMOs) are emerging, including from among large farmland operators that formerly

securitization of farmland demonstrate the potential for a much more complete financialization of farmland in the future.

Keywords:

financialization	farmland	land grabbing

Introduction

At the turn of the twenty-first century, farmland was still considered an investment backwater by most of the financial sector. Although some insurance companies have had farmland holdings for years, most institutional investors found farmland, and agricultural investment in general, unappealing compared to the much higher returns to be made in financial markets. However, this began to shift around 2007 as the prices of agricultural commodities started to climb. The recession that began with the bursting of the US housing bubble in 2008 caused the sector to suffer a momentary dip but also added fuel to the fire, as investors sought alternative, and more secure, places to put their money. The effects of the resulting farmland investment boom can be seen in both the Global South and the Global North. The large 'land grabs' (GRAIN <u>2008</u>) taking place in developing countries have their parallel in roaring land prices in countries with more developed land markets (Knight Frank 2011), which have led to speculation about a possible land price bubble (Abbott 2011). 4

Whether or not farmland markets are dangerously overheated, they are certainly hot. Celebrity investors like George Soros are known to be investing in farmland (O'Keefe 2009), and agricultural investment conferences, which provide opportunities for fund managers and farmland operators to network with end investors, have exploded in popularity. Farmland is drawing investment from 'high net worth individuals' as well as institutional investors such as pension funds, hedge funds, university endowments, private foundations, life insurance companies and sovereign wealth funds. While sovereign wealth funds generally have strategic motivations for their farmland investments, private institutional investors are flocking to farmland both for the respectable returns it delivers and for the role that farmland can play in an investment portfolio. Because farmland values have a high correlation to inflation but a low

to reduce portfolio risk through diversification (HighQuest Partners 2010). Investors generally acquire farmland through an asset management company or operating company. Asset management companies have responded to this sudden investor interest by creating a lavish buffet of new investment vehicles aimed at acquiring farmland. The extent of capital markets' interest in farmland is still relatively minor; even those institutional investors that have most enthusiastically embraced farmland generally commit less than one percent of their portfolios to this uncertain 'new' asset class (Carter 2010), and estimates of total institutional investment in farmland range between US\$30 and US\$40 billion globally (Wheaton and Kiernan 2012). However, it is undeniable that since 2007, global farmland real estate has undergone a makeover to become a desirable alternative asset class.

In October of 2010, the muckraking financial blog Zero Hedge (2010) wrote about a two-billion-dollar allocation to agricultural land made by the giant pension fund Teachers Insurance and Annuity Association - College Retirement Equities Fund (TIAA-CREF). The many reader comments that follow the post capture the irony of financial markets' sudden affinity for farms. One reader jokes that a farmland bubble is emerging which will culminate with the appearance of a new reality TV show, 'Farm Flippers, Thursdays this fall on HGTV' and even envisions some fake content: 'of course [we] put in all stainless steel & granite feed troughs and watering buckets. We project we'll make a 300 percent profit when we sell next month'. Another reader asks whether the turn to real assets is a 'Sign of Wall Street's fake paper going the way of the dodo? Or, more fake paper?' In this contribution I do not attempt to answer the interesting question of whether or not farmland is in a bubble, but I do take seriously the second reader's question. Slightly rephrased, the question might read: does the turn to farmland, among other real assets, signal a shift away from financialization? Or does it simply indicate that farmland itself is increasingly being treated as a financial asset?

'Financialization' is something of a catch-all term. Here I primarily follow Krippner (2011, 4) in using it to describe 'the tendency for profit making in the economy to occur increasingly through financial channels rather than through productive activities', though I also draw on other aspects of the diverse financialization literature. The case of farmland is interesting because the posited distinction between 'productive' and 'financial' sources of profit is not always easy to discern. Land plays two different economic roles; it is an essential factor of production, but it also acts as a reserve of

farmland investment combines a renewed interest in productive, real assets with an underlying adherence to the logic of financialization. Though farmland's financial qualities have always held some appeal for speculators, the financialization of the global economy since the 1970s has opened up new possibilities for the incorporation of farmland into financial circuits. These new farmland investments are occurring in ways that prioritize capital gains and other financial returns but are not necessarily divorced from productive use.

The relationship between farmland acquisitions and global finance is only just beginning to receive academic scrutiny within the literature on global land grabs. McMichael (2012) provides a useful theoretical framework by situating land grabbing in the context of global food regime restructuring (see also Burch and Lawrence 2009). The current land rush, he argues, signals the deepening contradictions of the corporate food regime. It is part of the response to a crisis precipitated by both rising costs of production (energy prices) and social reproduction (food prices). Finance plays an enabling role in this salvage mission, by increasing the fungibility of land and opening up new frontiers for investment. Harvey (2010) sees the land grab as a way to sop up excess capital; when opportunities for investment at home are limited, new parts of the global economy are brought into capitalism's embrace, providing a 'spatial fix' for the crisis. On an empirical level, Daniel (2012) explores the rise of private equity funds operating in African land markets and the ways that development finance institutions facilitate this trend. The present paper contributes to this nascent interest area with a theoretical examination of the evolving interface between farmland and finance globally. It identifies broad trends in farmland investing with the potential to affect countries in both North and South.

This contribution draws from over 40 interviews with actors along the farmland investment chain - end investors, asset managers and farmland operators - as well as from participant observation at farmland investment conferences. The following section provides the paper's theoretical framework, which combines two areas of political economy: work on financialization, primarily from economic sociology, and work on the treatment of property as a financial asset, primarily from critical geography. The third section describes the ways in which the current wave of farmland investment deviates from the norm of financialization; many investors acquire farmland as part of a productive agricultural operation, and the trend is bolstered by broader discourses that

financialization era. Capital gains, a mainstay of financialization, are central to even the most productive farmland investments, both as a source of inflation hedging growth and of potentially large speculative profits. The emergence of new types of farmland investment management organizations (FIMOs) also suggests that the desire to profit from farmland as a financial asset exists not only among financial actors but also among commercial actors who have typically invested in farmland primarily as a means of production. Finally, steps toward the securitization of farmland (i.e. the sale of shares in the pooled income stream from various farm properties) represent the frontier of farmland financialization. The conclusion considers possible social and environmental implications of Wall Street's emerging love affair with agriculture.

Financialization and land as a financial asset

Financialization: macro-level and institutional approaches

Epstein (2005, 3) captures the breadth of the financialization literature in his blanket definition of financialization as 'the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of domestic and international economies'. On a macro level, many theorists with roots in Marxist or World Systems analysis see financialization as a response to the systemic problem of capitalist over accumulation. For Arrighi (1994), financialization is a historically recurring phenomenon in which, midway through a 'cycle of accumulation', capitalist accumulation shifts its emphasis from commodity production and trade to finance (see also Krippner 2011). The US-led cycle of accumulation that occurred in the twentieth century, he argues, shifted into a phase of financial expansion in the early 1970s. The US government, working to maintain its hegemony, facilitated this shift through the abandonment of gold convertibility for floating exchange rates, the adoption of tight monetary policy and high interest rates, and the deregulation of the banking sector. Harvey (2010), like Arrighi, attributes the turn to financialization in the early 1970s to a capitalist crisis of overaccumulation, though he sees it as more historically specific to the political and ideological rise of neoliberalism. The actual mechanism by which financialization is able to postpone a crisis of accumulation is best addressed by literature on market bubbles (Kindleberger and Aliber 2005). During a financial bubble, skyrocketing expectations remove the limit on asset prices, allowing for far higher

The distinction between 'real' and financial sources of profit is a central element of this literature. Following in the Arrighian tradition, Krippner (2005) argues that the financialization of the US economy can be seen as occurring on two fronts. 'Sectoral' financialization describes the fact that the financial sector is playing an increasingly large role in the economy as a whole relative to other sectors; the profits made by banks, asset managers and other providers of financial services have been steadily gaining on those made in other lines of business. 'Non-sectoral' financialization describes the growing importance of financial income in the form of earned interest, dividends and capital gains on investments to non-financial firms; rather than just selling cars and plane tickets, auto companies and airlines increasingly make money from financing car loans or investing in energy derivatives.

Shifting economic institutions have contributed to the financialization process. The growing concentration of investment power in the hands of institutional investors (Useem 1996), the corporate takeover movement of the 1980s, and the emergence of 'shareholder value' as a principle of corporate governance (Fligstein <u>2001</u>) have all played a role. These trends put increasing pressure on non-financial companies to demonstrate impressive performance for capital markets and to prioritize high returns to investors (Davis 2009). This has led to concern that firms may be sacrificing longterm investment in productive capacity in order to meet the short-term demands of institutional investors (Lazonick and O'Sullivan 2000). Competitive pressure within the business of investment management has also led managers toward shorter and shorter investment horizons (Parenteau 2005).

Another institutional shift associated with financialization, is the proliferation and growing complexity of financial securities in recent years (Davis 2009). Securitization is the aggregation of income streams from a pool of underlying assets to form a new financial instrument in which investors buy shares. It turns illiquid assets liquid and spreads the risk of the underlying enterprise among many investors. Leyshon and Thrift (2007, 100) argue that a key dimension of financialization is the search for ever more unorthodox asset streams to use as a means for raising investor capital. They stress, however, that though the growing complexity of securities has increasingly obscured the relationship between financial assets and the real income streams upon which they are based, this connection, however tenuous, cannot be severed entirely.

Some scholars have recently suggested that the current wave of financialization is

crisis' which set off the phase of financial expansion, while the crisis of 2008 was the 'terminal crisis' which indicated that this wave of financialization could no longer sustain itself. For Krippner (2011), the financialization of the US economy was the unintended consequence of government policies aimed at avoiding the thorny distributional questions of the 1970s by turning decisions over to the market. Now, however, she suggests that 'the limits of financialization as a strategy for deferring social and political conflicts appear to have been reached' (137), raising the question of what comes next. On an institutional level, Fligstein (2005) has also hinted that financialization may have reached its limits. He argues that, thanks to such corporate accounting scandals as Enron, 'Financialization in the pursuit of increasing shareholder value has been given a bad name from which it is unlikely to recover' (Fligstein 2005, 223).

The current farmland investment boom can shed some light on the future of financialization. Investor interest in such a tangible, productive asset could lend support to the idea that financialization is 'going the way of the dodo' as the Zero Hedge reader suggested. Land's second economic role as a financial asset, however, complicates this picture.

Land as a financial asset

The distinction between the real and the financial economies becomes somewhat tenuous when applied to farmland. This fuzzy boundary arises from land's double function as productive and financial asset. Harvey (1982), building on Marx, delves into the source of this ambiguity and in doing so lays the groundwork of a theoretical framework for the financialization of land. He argues that the distinction between landlords, who collect ground-rent based on their monopoly control of a natural resource, and capitalists, who collect interest on invested capital via the use of land as a means of production, is increasingly becoming blurred. Rather than consisting of two separate social classes, he argues, capitalist investors are now buying the land themselves and viewing it as a claim on anticipated future revenues - in this case the stream of rental payments - just like any other interest-bearing investment. In other words, property is increasingly being treated as a 'pure financial asset'. 'The land becomes a form of fictitious capital, and the land market functions simply as a particular branch - albeit with some special characteristics - of the circulation of interest-bearing capital' (Harvey <u>1982</u>, 347).

Research in urban European property markets in the 1980s and 1990s demonstrated that it was no longer just financial investors who had come to see real estate as a financial asset. Haila (1988) and Coakley (1994) both take as their starting point the Marxian view that property has both 'use value' – those qualities which help it to fulfill human needs – and 'exchange value' – what it can acquire on the market. Both researchers found that urban property was being increasingly prized for its exchange value, not only by financial actors, but also by non-financial actors – an observation that recalls Krippner's discussion of 'non-sectoral' financialization. Non-financial firms had 'begun to require maximum profitability also from their real property which has until now served as a framework for activity' (Haila 1988, 92), while even residential property owners took advantage of property booms to flip their homes (Coakley 1994). However, while Harvey and Haila argue that land is becoming a pure financial asset, Coakley (1994) contends that the unique qualities of property – its imperfect substitutability, its illiquidity and its limited divisibility – mean that it is only a 'quasi-financial asset' in which rent and interest remain analytically distinct.

Awareness of land's dual role as productive asset and financial asset can be seen in the economic school of thought arguing that value may lie 'hidden' in property investments, making it possible to 'unlock' this value through institutional arrangements that increase liquidity. The classic version of this theory comes from de Soto (2000), who argues that formalizing property ownership for the poor allows them to release value by using property titles as collateral on loans. A corporate version of this thesis appears in the 'opco-propco' schemes whose premise is that property-owning corporations can raise more investment capital by splitting themselves into two distinct entities: an operating company that runs the business and a property company that owns the property and collects (potentially securitizable) rental payments from the operating company (Christophers 2010, Burch and Lawrence 2013). Christophers (2010) argues that both the de Soto and opco-propco models rest on a 'mystification' which alleges first that property itself contains a source of value outside of the activities it houses, and second that it is possible to disentangle the exchange and use values of a property and market them separately.

The literature on the treatment of property as a financial asset has tended to focus on urban real estate, with less written about agricultural land. Indeed the financialization of farmland seems to present unique challenges – use and exchange value are

those activities. However, research on British farmland markets during the 1970s foreshadowed some of the trends seen today. Massey and Catalano (1978) found that financial investors were buying British farmland and leasing it out to tenant farmers, motivated by the rental income and, increasingly, by the potential for property value appreciation. They contrasted this behavior with that of agricultural producers who valued farmland only as a productive asset (i.e. for its use value) and raised concerns that these investors were inflating land prices and outbidding 'owner-occupier' farmers. Whatmore (1986, 114), however, rejects this rigid distinction, arguing that 'owner occupiers are active (and not always unwitting) participants in the speculative rise in land prices, rather than the passive victims of outside speculators or of a land market with a mind of its own'. She nonetheless argues that institutional investors do have the effect of importing volatility into land markets. Because they treat land as fictitious capital, their decision to keep or sell it is influenced not just by alterations to the agricultural use value of the land, but by alterations in the wider financial environment, including changes in inflation, interest rates and the profitability of other assets.

The farmland investment boom: a return to the real...

Taking an Arrighian understanding of financialization as increasing accumulation through financial channels as opposed to productive ones, several aspects of the current farmland investment boom break with the trend. Most importantly, many of the farmland investments that have been initiated since 2007 are functional agricultural projects, not just land purchases. Investors looking to get exposure to farmland have two basic investment strategies at their disposal - I will call them 'own-lease out' and 'own-operate'. $\frac{3}{2}$ The own-lease out approach is the more conservative. The investor simply acquires the land, finds a tenant operator, sits back and begins receiving an income stream in the form of rental payments, as well as capital gains from appreciation. The land acquisition and leasing is often done via an external asset manager, who in turn takes a cut of the profits. This strategy fits Harvey's view of the treatment of land as a pure financial asset. It is attractive to investors who view land as a relatively long-term source of stable returns, portfolio diversification and inflation hedging, including many institutional investors. In the own-operate approach, on the other hand, the investor is financially involved in both the purchase of the land and the agricultural production that takes place on it. Again, the investment is generally

below). In this case, however, the investor is exposed to the higher risks and returns associated with engagement in agricultural production itself, making it particularly popular among those drawn to agricultural investment for the potentially high profits.

In the current farmland rush, many investors are taking an own-operate approach. As a means of production, land has acquired renewed importance over the last few years due to a constellation of factors: population growth, increasing meat consumption in developing countries, biofuel policies that divert grain into energy markets, over-taxed water resources and climate change (Cotula 2012). For many investors, the agricultural commodity bonanza that results from all of this man-made scarcity is simply too good to pass by without investing in commodity production itself. Therefore even some institutional investors, whose long-term liabilities to pensioners or insurees match well with the steady flow of income from rental payments, are opting for a more active strategy involving production income.

In addition, whether or not investors put capital into agricultural operation, the discourses they draw from indicate a view of farmland that is uncharacteristic of financialization. Two current financial perspectives, in particular, support this turn to land and agriculture. First of all, investors who are drawn to farmland are often motivated by a desire to get the right kind of exposure to long-term trends or extreme events that would alter the political economy of global agriculture. Among the new farmland investors, the most common iteration of this perspective is a focus on global population growth and increasing resource scarcity. The influential investor Jeremy Grantham, for instance, espouses an unapologetically neo-Malthusian view (Grantham <u>2011</u>), which leads him to conclude that farmland and forestry will outperform other assets over the long term (Kolesnikova 2011). Meanwhile, the Hamburg-based investment firm Aquila Capital, which manages funds for agriculture and other real assets, has Dennis Meadows, the former director of the Club of Rome think tank and coauthor of The limits to growth, on its board of directors (McIntosh 2011). At one major agricultural investment conference, all of the attendees were given a DVD of the documentary film Last supper for Malthus, which examines the global food crisis. The film ends on a note of technological optimism, but not before hitting home Malthusian arguments about population growth and resource scarcity. This discursive emphasis on resource scarcity is a reminder that land's productive qualities are far from incidental to the logic of investment.

A second influential financial perspective comes from advocates of 'value investing'. This deceptively simple investment paradigm, popularized by Warren Buffett, emphasizes choosing investments based on their intrinsic value and long-term fundamentals, thereby providing some degree of insulation from the vagaries of investor sentiment. When asked in an interview for his view on gold, Buffett contrasted it unfavorably with farmland, emphasizing productive capacity. He said that if he had a choice between all of the gold in the world, worth US\$7 trillion, or an equivalent value in productive assets, he would choose the latter:

> [If] you offered me the choice of looking at some 67-foot cube of gold and ... fondling it occasionally, you know, and then saying, you know, 'Do something for me', and it says, 'I don't do anything. I just stand here and look pretty'. And the alternative to that was to have all the farmland of the country, everything, cotton, corn, soybeans, [and] seven Exxon Mobils ... call me crazy but I'll take the farmland and the Exxon Mobils. (Crippen 2011)

For investors like Buffett, farmland's productive capacity is key to its value as an investment, regardless of whether the investment is in production or just the land itself.

Since 2007, this perspective on farmland has gained adherents due to increased investor distrust of markets. Unlike many financial products, the source of farmland's value is appealingly transparent. One of the farmland fund managers interviewed explained that many of his investors were searching for more concrete investment options:

> They say 'I don't want to have any more derivative operations and I don't have any idea what they are doing at the end of the line. I can see and I can understand soybean production, a sugar mill operation. I can see, I can test, touch, and I can understand all the numbers, so I want to put at least part of the money in this kind of investment'.

For investors motivated by this logic, a direct investment in farmland is significantly different from investments in financial assets based on agriculture. As the keynote speaker at one mid-Western farmland investment conference put it, 'You don't invest in commodities, you speculate or hedge with commodities. You invest in something like land' (Dotzour 2012).

The approach to agricultural investment that emerges from these two interconnected perspectives deviates from the modus operandi of the financialization era. At least in theory, it takes a relatively long-term view of farmland ownership and prizes it for its use value. A prominent investor speaking at a recent agricultural investment conference could almost have been paraphrasing Arrighi (2009) on the 'terminal crisis' of financialization:

> The world is changing dramatically. You know, for many periods in world history it was the financial centers that were in charge, and then for many periods it was the people who produced real goods - the oilmen, farmers, the miners – and then you had long periods when the finance people were in charge again. This is a huge change that is taking place, which unfortunately most people don't see ... I mean, finance is a terrible place to go right now. It's over competitive. Huge leverage ...

He concluded that direct involvement in agricultural production or mining was the best way to stay on the right side of this historical shift away from finance.

Of course, an investor who chooses an own-lease out strategy on the thesis that agricultural production will be increasingly vital in years to come is still treating land as Harvey's pure financial asset. However, investor motivations are not entirely inconsequential in that they seem to reveal at least a partial break with financialization construed more broadly. They indicate that, at least among a sub-section of capital market investors, investment in production or in the means of production has a renewed appeal. The discourses and investor rationales that characterize the current turn to farmland investing evince disillusionment with accumulation via financial channels and a desire, albeit partial and perhaps temporary, to return to the real economy.

The farmland investment boom ... or finance as usual?

Concurrent with this movement to make productive investments in agriculture and other natural resources, however, is a contradictory trend in which land is increasingly governed by the logic and tools that emerged with financialization. From this perspective, as TIAA-CREF's Head of Natural Resources and Infrastructure Investments real estate, private equity, [and] hedge funds did in the past' (McFarlane 2010). Rather than being treated as a pure financial asset as Harvey suggests, however, I will argue that the new farmland investments are premised on land's profitability as both a productive and a financial asset.

This section discusses three aspects of the ongoing financialization of farmland. First, I point out that even the productive, own-operate investments discussed above place a heavy emphasis on the profits to be made from land appreciation. Second, the emergence of new farmland management entities from within both the financial sector and the agribusiness sector demonstrates that this treatment of land as a financial asset goes beyond capital markets to those who have traditionally been interested in land for its use value alone. Finally, the emergence of farmland securitization schemes illustrates an extreme case of farmland financialization in which the profit streams from agricultural land are used as the basis to construct an actual financial asset.

Cultivating capital gains

The farmland investments initiated since 2007 place a heavy emphasis on capital gains, a type of financial return. The cash returns to the productive use of farmland are generally in the range of 3-7 percent (Allison 2005). This is a profoundly uninspiring figure to institutional investors, who are often accustomed to double-digit returns and who, in the case of pension funds, frequently base estimates of future obligations to retirees on a return expectation of at least 8 percent (Reilly <u>2010</u>). Under these circumstances, modest farmland has largely managed to capture the eye of capital markets because of its potential to appreciate. Of the farmland fund managers interviewed for this study, almost all expected at least 50 percent of their fund's total internal rate of return (IRR) to come from land appreciation, and some expected substantially more. Here I discuss the importance of capital gains to farmland's appeal as both an inflation hedge and as a real estate speculation.

Many investors are drawn to farmland primarily because it is widely believed to act as an inflation hedge, preserving the value of invested capital better than most financial assets. These hedgers may be quite conservative; they often seek a long-term ownership stake in developed country farmland (such as North American or Australian) and lease out their land. Farmland's desirability as a store of value and inflation hedge is perhaps best illustrated by the comparisons between farmland and gold that have

appreciates over time and benefits from the 'flight to quality' during economic downturns. Unlike gold, however, farmland is also a means of production, a fact that -Warren Buffet's example notwithstanding - sometimes gets lost in the metaphor. In media and investment publications, farmland is frequently referred to as 'black gold' (Cole 2012), as 'like gold with yield' (Koven 2012) or 'gold with a coupon' (Land Commodities 2009). At one investment conference, a South American agricultural fund manager took this analogy even further, arguing that if Brazilian and Argentine row crop farmland is like gold, then a more niche investment in Chilean vineyards or orchards is like investing in diamonds, emeralds and rubies. Such expressions are telling because they imply that farmland's primary appeal is its ability to store and even increase in value (leading to capital gains), while the fact that it also comes 'with yield' in the form of operating returns or rent is just the icing on the cake. These comparisons imply that it is a store of value first and foremost and a means of production only as an afterthought.

For many other investors, however, farmland's inflation hedging properties alone do not constitute sufficient motivation to invest. As a manager at one university endowment put it,

> farmland competes for every investment dollar like any other asset class would. That said we look for certain diversification, but we are not willing to accept a lower yield on the thesis of food prices going up or keeping an inflation hedge.

This quotation reflects Harvey's image of land being treated as an investment like any other and demonstrates that many capital market investors are extremely reluctant to temper their high return expectations to accommodate farmland. For these more aggressive investors and the asset managers who work for them, the potential for large capital gains takes on an even more prominent role. They invest in regions that are undergoing particularly fast appreciation whether due to policy changes, infrastructural improvements or simply growing investor interest. This speculative approach means that timing is important; according to one investment publication, 'their focus is a carefully timed purchase and subsequent disposal' (InvestAg Savills 2011).

Although passive appreciation is often key to these more aggressive farmland investments, it is not the only source of capital gains. Many farmland managers also

add value to the property. The methods for adding value range from simply formalizing legal titles to the wholesale transformation of forested land into farmland. Other common transformations include the addition of irrigation or transportation infrastructure and the consolidation of a number of smaller properties. In addition, operation itself is often a route to obtaining capital gains. When I asked one European pension fund manager why he preferred an own-operate approach to farmland investment, his answer was simple: 'if you participate in the operating part of the business you have a better control over the land appreciation' since land value is based largely on productivity. Once these sources of appreciation are added to the operating returns, the IRR envisioned by asset managers can easily surpass 20 percent for transformative investment strategies on marginal land in Latin America, Africa and Eastern Europe.

The point I wish to make here is that, due to land's dual nature as a productive and a financial asset, it is possible to use the land productively while simultaneously speculating on financial returns from its appreciation. The ongoing centrality of capital gains, for both hedgers and speculators, indicates that the farmland investment boom has not deviated much from the reliance on financial profits that Arrighi, Krippner and others associate with financialization. The use of land as a financial asset is obvious among those investors who adopt an own-lease out approach, as their returns are constituted by rental income and capital gains on appreciation (itself just rent capitalized into the value of the land). However, among those who adopt an ownoperate approach, about half the returns still take the form of capital gains. Coakley's assessment of property as a quasi-financial asset appears particularly apt in this case. Contrary to simplistic portrayals of recent large-scale farmland acquisitions as either productive or speculative, this demonstrates that they can be, and frequently are, both at the same time.

The new FIMOs

Structural changes within the farmland investment sector indicate that land is being used as a financial asset by two different sets of actors; new farmland managers are emerging from within the financial sector but also from within agribusiness itself. Just as Haila (1988) and Coakley (1994) observed in the case of the booming urban property markets of the 1980s, farmland is being treated as a financial asset not only by financial companies but also by non-financial companies that previously saw it primarily

In certain ways, the shifts occurring within farmland investing mirror those that have already occurred in US timberlands. The economic transformations that began in the 1970s - the increasing size and power of institutional investors and the corporate takeover movement - contributed to a financialization of US timberland beginning in the 1980s (Gunnoe and Gellert 2010). Vertically integrated US timber companies, facing increasing market pressure, began to view their land holdings as deadweight on their balance sheets, and ownership was gradually transferred to institutional investors. The land was either included in a real estate investment trust (REIT) or was managed on behalf of institutional investors by a Timberland Investment Management Organization (TIMO). This section considers the emergence of new asset managers entirely or partially dedicated to farmland, referred to here as FIMOs (farmland REITs are discussed in the following section). In the US, three major FIMOs - Hancock Agricultural Investment Group (HAIG), Prudential Agricultural Investments and UBS Agrivest - have existed since the 1980s or 1990s, and the former two share parent companies with major TIMOs. Like TIMOs, these management firms assemble a portfolio of land tailored to fit the client's investment thesis and appetite for risk in exchange for a management fee. They generally have a minimum investment of US\$50 million and so are accessible only to institutions and extremely wealthy individuals. They also tend to take a relatively long-term view of farmland assets in which land is held for years or decades as a source of rental income and a store of value. In recent years, however, the farmland investment landscape has changed with the emergence of two new types of FIMOs.

The first type of FIMO has its origins in the financial sector. The years since 2007 have seen the advent and proliferation of farmland private equity funds (Bergdolt and Mittal 2012, Daniel 2012)4. While private equity funds are generally associated with the purchase, upgrading and resale of companies, the new farmland funds may acquire farmland-owning agribusinesses or simply invest directly in a portfolio of land. Like typical private equity funds, however, they are usually set up as limited partnerships, operate for a fixed term of seven or 10 years, and have management fees and carried interest on the order of 2 and 20 percent respectively. While this fee structure is likely higher than that of the managed accounts offered by traditional FIMOs, these funds also have much lower barriers to entry, sometimes available to investors with as little as US\$200,000 to put into farmland. They therefore offer investors exposure to a portfolio of farmland that is generally at least somewhat geographically diversified -

been sufficient for the down payment on one US farm property. Investors now encounter a wide range of options for making private equity investments in global farmland, from NCH Capital's Agribusiness Partners Fund, which boasts 700,000 ha of farmland in the former Soviet Union and Baltic States (Bergdolt and Mittal 2012), to Emergent Asset Management's African Agri-Land Fund, which focuses on sub-Saharan Africa (Daniel 2012).

In order to return capital to investors after the term of the fund is complete and receive their own compensation, the fund managers must have some kind of exit strategy. The most common exit strategies are taking the entire fund public via an initial public offering (IPO) on the stock market, selling off the properties to a strategic buyer or rolling them over into a new fund. This last option would allow investors to keep the farmland assets even after the fund's term ended. Because most of these funds are only in their third or fourth year of operation, it is not yet possible to know the form that most of these exits will take. Although many of the funds produce on, and often make improvements to, the land they acquire, they treat their portfolio of farmland much like any other investment portfolio in terms of expected profits and time frame of investment.

A second type of FIMO which has emerged since 2007 has its lineage in large agricultural operators, some of which are seeking to capitalize on high rates of farmland appreciation by spinning off a part of their farmland portfolio into a separate asset management business. This is particularly the case in South America where a concentrated land ownership structure has made it possible for operators to own hundreds of thousands of hectares of land. The case of the publicly traded, Brazilian agribusiness SLC Agrícola is illustrative. This cotton, corn and soy producer has recently created a separate agricultural property company called SLC LandCo. In order to construct LandCo., SLC took 60,000 ha of its existing 200,000 ha land portfolio and used it to raise ~US\$240 million from British asset management firm Valliance in exchange for a share of just under 50 percent in LandCo. (SLC Agrícola 2012). These funds will be used to purchase additional agricultural land with potential for rapid appreciation, all of which will be operated by SLC. The creation of this land-focused fund in addition to SLC's normal operations signals the current appeal of capital gains from land appreciation. The company underscores this point in the title of their current investor presentation: 'SLC Agrícola: value from both farm and land' (SLC Agrícola

Radar Propriedades Agrícolas, a rural real estate business. As the Cosan website explains, Radar aims to 'capitalize on new business opportunities in the Brazilian rural real estate market, purchasing properties with significant potential for appreciation and leasing them to major agricultural producers. After they reach their target value, the properties are put on the market' (Cosan 2012).

The examples of LandCo and Radar demonstrate that, in a booming land market, agricultural operators are increasingly aware of the exchange value of their land base. HighQuest Partners (2010, 9) explain that the type of restructuring they have undertaken serves to 'create a platform for raising capital from a larger universe of investors which maintains a preference for land ownership (a hard asset) over investing in farm management operations'. These new FIMOs make use of the same logic that Christophers (2010) observes in opco-propco restructurings. Although the parent companies are still primarily commercial operators and the land is still used as a productive asset, these firms are taking steps to more effectively profit from farmland appreciation. While treatment of land as a financial asset is perhaps to be expected in the case of the new farmland private equity funds, whose roots are in the financial sector, it is more telling in the case of the FIMOs that have emerged from within commercial agriculture itself.

Increasing land liquidity through farmland securitization

Securitization represents the frontier of farmland financialization. It would transform farmland from a notoriously illiquid asset to an extremely liquid one. Securitization of residential real estate is, of course, widespread and was intimately connected with the crash of the US housing market in 2008. Securitization of farmland real estate, however, is only in its initial stages. It would likely mean the aggregation of the rental payments made by tenant farmers on several properties into a single income stream that investors could then buy into, probably in the form of stock in a publicly listed farmland fund.

The securitization of farmland is all the more significant because it actually poses some serious difficulties not present in the securitization of other types of real estate. Land's ability to store value and appreciate over time, which makes it desirable to many investors, also makes it a weight on public company balance sheets. Buildings, equipment and most other capital assets are classified as depreciable by the Generally

allows a company to declare the initial capital outlay for the asset as a tax-deductible expense over the years that follow. For publicly listed companies with a large amount of their fixed assets in farmland, the inability to depreciate sets them at a disadvantage relative to other public companies. In the shareholder value era, when stock price largely depends on company financial statements, farmland can therefore pose something of a liability in public markets.

Until recently, North American retail investors and those who wanted a more liquid investment could only invest in farmland indirectly by buying stock in a landowning public company, such as the South America-based agribusiness giants AdecoAgro, Cosan and Cresud, all of which own hundreds of thousands of hectares of land and are traded on the New York Stock Exchange. In 2007, investors gained a second investment option with the advent of the agribusiness exchange-traded fund (ETF). ETFs, such as the Market Vectors Agribusiness Fund, hold securities for publicly traded agribusinesses, and shares in the fund are themselves traded like stocks. Because many of the agribusinesses whose stocks are included in these ETFs own farmland, they give investors some indirect exposure to farmland.

The most obvious way for the securitization of farmland to occur is via a REIT. Established in the US with the Real Estate Investment Trust Act of 1960, a REIT is a corporate entity that is exempt from paying corporate taxes by virtue of the fact that it distributes 90 percent of its income directly to investors. The US has several timberland REITs, as mentioned above, while Australia and Malaysia boast public REITs focusing on timber and palm oil production, respectively. However, the international leader in farmland securitization is, strangely enough, Bulgaria. Bulgarian REITs, known as Special Purpose Investment Companies (SPICs), were made possible with the passage of a 2003 act that exempted these entities from corporate tax provided they, like US REITs, distribute 90 percent of income to investors (DTT <u>2005</u>). At least five public REITs were created in 2005 and 2006 with the view of profiting from inevitable land price increases when Bulgaria joined the European Union (EU) in 2007. They also aim to profit from the improved rent to be gained by consolidating the fragmented plots that resulted from the distribution of former state farms to their previous owners during the transition from communism.

Until a few years ago, North America did not even have a single private farmland REIT, but now there are several, and a few companies are racing to take farmland public. The firm based in Virginia that raised US\$50 million in a January 2013 IPO (NASDAQ symbol: LAND). Gladstone Land's parent company, Gladstone Investment Corporation, already runs a public REIT composed of commercial real estate, and Gladstone Land intends to apply for REIT tax status for the 2013 tax year (NASDAQ 2013). Gladstone Land owns 14 farms in California, Florida, Michigan and Oregon, comprising 1950 acres (Gladstone Land 2013b). The company takes no part in farm operation, and its profits come from leasing the farm properties out to corporate and independent farmer tenants. It acquires land, in part, through sale-leaseback deals, in which the farmer sells land to the company in return for a long-term lease to continue as the farm operator (Gladstone Land 2013a).

Another firm that has expressed interest in taking farmland public is the Canadian farmland investment company Bonnefield Financial. In January of 2012, Bonnefield announced that it had applied to the Canadian security regulatory authority to launch a C\$100 million initial public offering of a farmland ETF on the Toronto Stock Exchange (Canada Newswire 2012). Bonnefield already owns around 7000 acres of Canadian farmland which, like Gladstone Land, it acquires, in part, through sale-leaseback deals (Bonnefield 2012). In Saskatchewan and Manitoba, where corporate ownership restrictions prohibit public companies from owning land, Bonnefield intends to buy farmland mortgages instead of the land itself (Koven 2012) – a disconcerting idea given the role that mortgage-backed securities played in the financial crisis.

Turning farmland into a public security can have the unintended consequence of allowing use values and exchange values to become further detached. Although laborusing agricultural production remains the source of value in farmland investments (Harvey 1982) and securities depend upon such real income streams for their worth (Leyshon and Thrift 2007), they allow for an increasing divergence between the two. In an interview, an executive at one of the Bulgarian REITs told me that the crisis had increased this divergence in his company: 'After the financial crisis there is a big difference between the book value of the share and the market value because the price on the stock exchange is not so closely connected to our profits and activities'. The issue of share prices diverging from assessed land price is not specific to REITs, but is also a trait of farmland-owning public companies more generally. For instance, analysts often comment that shares in the South American farmland operator AdecoAgro trade well below their net asset value (see for instance Orihuela 2012). This divergence may

However, public farmland funds are not the only unusual financial vehicles aimed at increasing the liquidity of land. A new 'crowdfunding' company called Fquare, launched in August of 2012, is in the business of selling private farmland securities. Crowdfunding, best known for donation-based web sites like Kickstarter, is no longer just about supporting artists and charities. In April of 2012, the Jumpstart Our Business Startups (JOBS) Act was signed into law, reducing the securities regulations that apply to crowdfunding (Cortese 2013). While crowdfunded companies could previously only compensate their 'investors' with gifts like t-shirts and signed CDs, investors can now receive company debt or equity in return for their investment. In short, investment crowdfunding has become a new type of private market, which is easily accessible over the internet and not highly regulated (Rattner 2013). So far Fquare accepts only accredited US investors - individuals with a relatively high level of wealth and financial sophistication - but once the Securities and Exchange Commission (SEC) fully implements the JOBS Act, its founders plan to accept all retail investors. An investment in Fquare buys an ownership stake in an operational Corn Belt grain farm acquired via sale-leaseback. Investor profits come from farm lease payments and take the form of quarterly dividends in the range of 3–6 percent. Investors are able to select which farm properties they hold equity in, and both investment periods (3, 5 or 7 years), and minimum investments (as low as US\$5000) vary between investment properties (Fquare 2013). Perhaps most significantly, Fquare hopes eventually to establish a secondary market in which investors can buy and sell their farmland ownership shares to other Fquare investors, essentially rendering farmland liquid.

Although farmland has always had appeal as a financial asset, the amount of fixed capital it involves and its illiquidity have acted as barriers to investment. By securitizing farmland, Gladstone, Fquare and other companies like them are attempting to dismantle these barriers.

Conclusion

Occurring in the wake of a global financial crisis and in the midst of global environmental shifts that have brought renewed prominence to natural resources, the current farmland investment boom could be seen to indicate a deviation from the process of financialization. Farmland investors often draw from discourses that stress

operate approach that involves investment in agricultural production as well as the land itself. In many ways, however, this trend represents a continuation of financialization into new territories. Many farmland investors are eager to get exposure to agricultural production, but their investment calculus is also heavily dependent on the potential for capital gains from land appreciation. These investments depend on both the use- and exchange-value aspects of land. Meanwhile, new farmland investment vehicles, from private equity funds to public securities, are making farmland more liquid and accessible to a wider range of investors. FIMOs are emerging both from within the financial sector and from agribusiness itself, indicating that the use of land as a financial asset is not restricted to professional investors. Instead, the sector is characterized by crossover; financiers are using land as a productive asset, while operators are using it as a financial asset. Rather than a situation in which land is treated as a pure financial asset, land's financial qualities are increasingly valued but not necessarily divorced from its productive qualities. We may be seeing the emergence of a new type of financialization for an era of growing resource scarcity one in which farmland's role as a quasi-financial asset will be even more prominent. As McMichael (2012, 686) observes, the restructuring of the corporate food regime involves the opening of new investment opportunities for capital with the result that 'the so-called rational planning of planetary resources such as land (and water) is driven as much by financial goals as by material considerations'.

Several excellent macro-level overviews of land grabbing (Cotula 2012, McMichael 2012, White et al. 2012) have signaled the importance of financial processes but have not elaborated much on their role. This contribution has aimed to put some further meat on the bones of the land grab-financialization connection. It adds to existing empirical research (GRAIN <u>2011</u>, Bergdolt and Mittal <u>2012</u>, Daniel <u>2012</u>) by exploring how developments in the relationship between farmland and finance extend beyond the popular image of investors snapping up farmland in the Global South, to trends as diverse as Latin American agribusiness restructuring and soaring US land prices.

I have given relatively short shrift to the potential consequences of these developments. This is partly because the many worrying social and environmental implications associated with the global rush for farmland - among them peasant dispossession, deepening food insecurity and sweeping conversion to industrial agriculture - have already been well rehearsed. However, there are several implications

separation of ownership and control in land markets. The sale-leaseback arrangements pursued by Gladstone, Bonnefield and others can provide farmers with much needed financing, but they also transfer ownership away from the person farming the land. Aside from the obvious impact this has on the structure of agriculture, it also reduces the farmer's incentive to use sustainable practices by removing his or her stake in future productivity.

Some of the ways that investors 'add value' to farmland before re-selling could also reduce access to land for smallholders. Many companies, like the Bulgarian REITs mentioned above, see consolidation of small properties as an integral part of their strategy of land transformation. Their reasoning is that larger plots will be more attractive to agribusinesses and other strategic buyers that could potentially serve as their exit. In addition, some companies claim to add value by clarifying legal title where it was previously murky. In many parts of the Global South, an ironclad property title, lease or other use right will come at the expense of local residents whose legally flimsy claim lies only in years or generations of life rooted in that location.

There is also a danger of importing the short-termism of finance into land markets. This concern relates particularly to the more speculative investments being pursued by private equity funds. If capital gains are to be realized, rather than just serving the purpose of value storage, then the land (or the company that owns the land) must eventually be sold. For this reason, the new farmland private equity funds generally have seven- or 10-year time horizons. Fund managers need an exit to get paid, and an exit usually implies a sale. The idea of entering into land ownership with an 'exit strategy' in place would thoroughly confound most of the world's farmers, for whom hanging on to their land is a primary objective. For the investors involved, however, seven years actually is a long-term commitment, given that they can drop an unprofitable stock in an instant. Although many private equity fund managers argue that their short tenure as landowner will involve soil quality or other property improvements as a means to increase profit on re-sale, it seems equally likely that such a short-term view could lead to careless treatment of soil and water resources.

The financialization of farmland could also alter land market dynamics. If attempts at farmland securitization progress, it would become possible to buy or sell farmland almost instantaneously and for retail investors to acquire land as a financial asset. The increasing liquidity and volume of investment associated with securitization could

translates into the possibility of higher profits for speculators, it would not necessarily be welcome to those more staid farmland investors that were drawn to the sector for the steady, predictable returns. However, these investors - many of the pension funds and others employing an own-lease out strategy - could also contribute to changing land market dynamics. Global pension funds alone manage over US\$20 trillion in assets (Hua 2012). If all allocated just 1 percent of their portfolios to farmland investments, there would be US\$200 billion of pension money competing in global land markets. Many commentators have argued that the increasing participation of index funds in agricultural commodity markets has contributed to soaring global grain prices (Wahl 2009), and this could potentially have a similar effect. This amount of capital could raise the floor of land prices, putting it out of reach of small farmers, especially if it is concentrated it a handful of attractive markets.

Increasing financial interest in farmland may prove to be a transient phenomenon. The farmland bubble, if indeed one exists, may soon burst or simply deflate, particularly given that the appeal of land as a financial asset is highly dependent on interest rates. If, however, powerful institutional investors and financial companies continue to embrace farmland as a financial asset, it could have lasting effects on land ownership and farming worldwide.

This article is based on work supported by a National Science Foundation (NSF) Graduate Research Fellowship under grant number DGE-1256259, as well as by a Social Science Research Council (SSRC) International Dissertation Research Fellowship and a Louis and Elsa Thomsen Wisconsin Distinguished Graduate Fellowship. I would like to thank Geoffrey Lawrence, Philip McMichael, Jack Kloppenburg, Katharine Legun, Zenia Kish, and the anonymous reviewers for feedback on earlier drafts.

Additional information

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part of the financial sector, as well as the policy debate that surrounds foreign farmland investment in the case of Brazil.

Notes

- ¹ Financial sector demand for farmland is only partially responsible for steep land prices. For instance, existing farmers represented 72 percent of lowa farmland sales in 2009, while investors were responsible for only 23 percent (Duffy 2009).
- ² Confusingly, most institutional investors are actually asset managers themselves, while the real end investors are the pensioners or insurees whose money they manage. However, for clarity's sake I will refer to these institutions as 'investors'.
- ³ Investors interested in agricultural production but not farmland ownership could also adopt a third approach, 'lease-operate', in which they produce on rented land giving them the highest risk-return of the three approaches.
- ⁴ The new farmland investment vehicles actually include private equity funds, hedge funds, venture capital and specialized farmland funds operated by more mainstream asset managers. However, because the traditional distinctions between these vehicles do not always apply in the case of farmland (Bergdolt and Mittal 2012), and because the majority of new farmland funds have what would generally be considered a private equity-like structure, I will focus my discussion on the role of private equity.
- ⁵ The term 'securitization' is most often used to refer to the bundling of debt obligations, as in mortgage-backed securities. However, as Leyshon and Thrift (2007) observe, almost any income stream can be turned into a security. Urban real estate has also been securitized through equity REITs, in which the income stream comes from rental payments.

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