To: John Varones, Systima Management

From: John P. McCarthy

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Re: Twenty Good Questions

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1. **From your website:**
   "John started his finance and investment career as Executive Director of the Illinois Housing Development Authority, a $1.8 billion, 165-employee secondary mortgage market institution. At the time of his appointment, John was the youngest CEO of a state housing finance agency in the nation." How did this come about?

   I have always had an interest in government and public policy but also fascinated by the markets and investing. These are seemingly unrelated areas but if you look at the history of the U.S. you will see a deep underpinning of governmental institutions in the economy and in our capital markets. I was fortunate to combine these two interests in a one-year program that Governor Jim Thompson of Illinois started called the Dunn Fellowship. The goal of the program was to recruit a diverse group of recent graduates to state government and give them responsibilities and leadership roles that people in their early or mid-twenties could not receive in the private sector.

   A year later, I was fortunate to take a job on the policy staff of incoming Governor Jim Edgar who was a moderate, "good government" Republican. I primarily worked with state agencies involved in government-business relations in dynamic areas including energy, environmental regulation, economic development especially in the manufacturing sector and with various state bond financing agencies. I would also act as the Governor's liaison working with key stakeholders in these sectors. One of my agencies was the Illinois Housing Development Authority where I saw the government and capital markets interface firsthand. I would describe IHDA as the State of Illinois' version of Fannie Mae or Freddie Mac: a secondary mortgage market institution that spurs single family and multifamily housing for low- and middle-income populations. In his second term, I had the opportunity to be in Governor Edgar's cabinet and became Deputy Director for under a year and then Executive Director for three years at IHDA.

2. Has the affordable housing supply kept up with demand?

Unfortunately, supply has not even come close to meeting demand. Various think tanks and the U.S. Department of Housing and Urban Development (HUD) have pegged the demand to supply imbalance for affordable rental housing as high as 5 to 1. The reason is obvious, the cost of housing is high in most markets in the country (exacerbated in the last 15 years) while real income and wage growth for low- and moderate-income people has stagnated. Systima's market focus is on the government subsidized multifamily market where federal, state and local public funds and incentives subsidize the building of housing to make it affordable for eligible tenants. Affordable housing is not an entitlement in the U.S., so government funding has never been able to generate the supply needed to meet eligible demand.

The irony is that one major reason for the high cost of housing is, in part, government created: restrictive local land use, zoning and building regulations. The value of the U.S. residential for sale housing market is an estimated $30 - 40 trillion and multifamily housing stock is estimated at over $6 trillion. So, in the largest sector of the economy, the market is not allowed to work. Another key factor for the housing affordability crisis in the U.S. is weak and stagnant income and wage growth for low and middle-income working people, especially since the early 2000s.

3. Are the supply/demand characteristics, and affordability issues, the same in rural areas as urban areas?

The supply/demand dynamic is different in rural areas as compared to urban areas. In rural markets, you generally see a lack of economic and population growth coupled with less intrusive land use and building regulations which results in more of a balance. A negative effect you do see in rural areas is lower incomes vs urban because of weak economic conditions, resulting in lower rental rates. Thus, there is little market incentive to improve the existing housing stock let alone create new supply because owners can not earn a fair return on their investment.

Much of the existing rural multifamily stock was built in the 1970s and 1980s, especially through government programs administered by the U.S. Department of Agriculture and is in need of rehabilitation. While USDA programs do exist to help renovate the housing, the dollars are not enough. So the biggest difference between rural and urban is that rural areas do not need new supply and the existing stock needs to be upgraded.

4. **Are there some policy options under consideration to stimulate supply?**

Policies to stimulate supply are some of the most difficult measures to enact because they need to be passed at the local level in countless numbers of cities that regulate land use and building. There are few responsibilities that local governments covet more than controlling the housing and built environment because this is what matters to their constituencies. In California, the crucible of the nation's affordable housing crisis, the best the state could pass was a statewide single family "upzoning" law in 2021 that allows single-family lot density to increase to up to four single family units. This was adamantly opposed by local officials and cities and will do little to bring more supply to the state. The Terner Center for Housing Innovation at the University of California Berkley deemed that most single-family parcels under this new law would not see any new development and this in a state that has an estimated 3.5 million shortfall in housing units.

5. **There are various federal and state programs to incent private capital into affordable housing. Do they have different roles or goals? For example, do HUD and FNMA play different roles?**

I would put the roles of the various government and quasi-government actors into two categories: 1. subsidy provider and 2. liquidity provider. HUD primarily provides rental subsidies through programs such as Section 8 where the federal government pays the monthly rent above the eligible tenants required portion by entering into long term Housing Assistance Payment (HAP) contracts with private landlords, so the rental income stream is highly secure. The other type of subsidy is a capital subsidy as opposed to a rental subsidy. This mechanism provides low cost or no cost capital to build the housing, giving a private developer the ability to charge a below market rent to the eligible tenant. The main capital subsidy comes from the federal Low Income Housing Tax Credit (LIHTC) program which was created in 1986. The LIHTC program is the cornerstone of the U.S. affordable housing finance system and is recognized as the most successful government housing program in history. LIHTCs on average create over 125,000 new units of affordable housing every year. LIHTCs are granted by the U.S. Treasury Department to state housing finance agencies (like IHDA) who in turn allocate the LIHTCs to development projects on a competitive basis.

The second role of government is as liquidity provider. This is the business model of the Government Sponsored Enterprises (GSEs) Fannie Mae and Freddie Mac and to a lesser extent the Federal Housing Administration (FHA). With combined balance sheets of over $5 trillion and national origination networks, Fannie and Freddie utilize their 'AAA' credit rating and access to the global capital markets to provide reliable capital to the industry. Since the Great Financial Crisis, the GSEs have come under federal conservatorship and their regulator, the Federal Housing Finance Agency, has mandated that the majority of the GSEs multifamily finance activities be directly tied to low- and moderate-income housing which reduces the cost of that capital to borrowers.

6. **Can the LIHTC program, the main subsidy provider, be increased by the U.S. Treasury?**

   Federal legislation increasing LIHTCs would need to be passed and signed into law. Indeed there have been a number of legislative increases to the LIHTC program over the years but again the added subsidy dollars have not come close to filling the supply gap for affordable housing. The other strange dynamic is that the tax credit is purchased by U.S. corporate taxpayers (primarily banks and insurance companies) but for this tax benefit to have value they need long term and predictable tax liability so there is a limit to the ability of the tax credit to bring capital to this market given the narrow buyer base.

7. **Fannie and Freddie, the main liquidity providers, are still under federal conservatorship. Do they allow the issuance of 30 year, fixed, repayable mortgages? Some analysts advocate splitting them into two companies along their essential functions: one to be a securitizer/creator of mortgage-backed securities, and the second to be an insurer of those securities. Good idea?**

   In my opinion you have asked one of the most important and complex questions in the global capital markets. The one thing I can say is that the GSEs with their effective U.S. government backing provide unparalleled stability and liquidity for single family residential and multifamily mortgage financing, especially in highly disruptive markets like we experienced in 2022. If the U.S. deems the availability of housing mortgage capital as an important economic and social good than however you remake the GSEs, you need to maintain that liquidity function.

8. **Do developers in affordable housing have different risks than other areas of commercial real estate?**

   On the development and construction side, affordable developers have the same risks as market rate apartment developers: entitlement, construction costs and completion, lease-up/stabilization and long-term operating risk. The additional risks relate to funding or subsidy award risk as well as long term compliance risk with the various government programs that are utilized. The funding risk is the greater of the two because these resources are oversubscribed and these projects can only proceed with adequate subsidy awards typically from the state housing finance agency. On the compliance side, LIHTC sponsors must abide by a myriad of requirements for a 15 year period. If developers lease to ineligible tenants or charge above the required rent, then they can suffer recapture of tax credits and financial loss. This risk is manageable and very remote in most cases.

   The LIHTC equity investors in the housing, typically the largest banks and insurance companies in the US, require developer guarantees for not only construction completion and

stabilization but long-term operating guarantees to fund deficits. So, this is a risk that does not typically exist in market rate multifamily.

9. As a lender, do you have unique risks in affordable housing?

There is one major credit risk unique to lending to project based Section 8 properties. In relation to Section 8 projects, lenders and LIHTC equity investors, size debt based on Gross Potential Rents generated by the HAP contract rents which are set at market. While HUD enters into 20-year HAP contracts with the private landlord, the funding of the HAP contract is subject to annual Congressional appropriation. So, in the extremely remote (but possible) event that Congress does not appropriate the requisite funds to the Section 8 program to make the HAP payments, the HAP contract income will be reduced or eliminated. The tenant is required to pay 30% of their income regardless of HUD actions and the landlord will not have the ability to remove the tenant. While this a serious problem for the borrower and lender, this has never happened in the 50-year history of the Section 8 program and there are a dozen mitigants and plans that have been structured into these loan documents as well as laws and practices that HUD is obligated to follow to ameliorate the negative impacts of this de-funding.

10. You also invest in risk transfer instruments. What are these and why are they needed?

In addition to direct lending, Systima is also active in credit risk transfer activities with the GSEs and banks. As regulated entities, these market actors need to manage credit risk in their loan books and the two primary ways to transfer risk to the private capital markets is through securitizations and/or credit linked notes (synthetic securitizations). Freddie Mac is the preeminent capital markets institution and has the largest securitization programs in the commercial real estate industry. Depending on a number of factors, Freddie will sell first loss credit risk on a securitization pool (the B Piece) to private credit investors like Systima. Historically, Systima is one of Freddie Mac's largest B piece buyers for their affordable housing securitization pools. Here we are buying a structured mortgage pass-through certificate (we own a share of the cash flows in the underlying mortgages).

With a credit-linked note, Freddie Mac or a bank effectively buys funded credit protection on a reference pool of mortgages through the issuance of a corporate note. The note coupon and principal repayment is a general obligation of the issuer to pay subject to the performance of the reference pool. Systima in partnership with Freddie Mac created the first ever CRT for multifamily mortgages with the Structured Credit Risk (SCR) Notes in 2016. The SCR Notes were modeled after the STACR bonds that Freddie created to do CRTs on their massive residential mortgage exposure.

11. So, private investors are providing a kind of re-insurance to FNMA?

Exactly. The principal and interest of Agency Mortgage Backed Securities (MBSs) are guaranteed by the GSEs and held by high grade fixed income investors throughout the world. The CRT transactions provide the GSEs with funded reinsurance on the first loss risk up to 5% or 7.5% of the reference pool. This attachment/detachment point is the likely place where the GSEs would experience actual credit losses.

12. Do different cities have different risks? Can you give a view or opinion on a city where the goals of affordable housing development are working fairly well?

As discussed, various government subsidies directly or indirectly create high quality and affordable apartment units. The LIHTC program is available to tenants at no more than 60% of the area median income. The "area" is defined as the Metropolitan Statistical Area which is broad and a multi-county area. For example, the Chicago MSA includes Cook County and the five collar counties. So, a risk exists where a new LIHTC development is built and targets tenants at 60% of the AMI but the sub-market has a lower rent, so the LIHTC unit does not have a rental discount to the competitive properties in the submarket. Generally speaking, a LIHTC owner does not want to compete with a market rate property not because the design and amenities are not competitive (the deep public subsidies allow for high quality construction, design and amenities) but because the market property is offering the same rent but is not restricted to tenants at 60% AMI or below. So, to answer your question you need to look at the specific sub-market within the MSA.

Most large urban cities have highly competent governmental agencies to help the private sector and market deliver affordable housing, but one noteworthy city is New York. Due to geographical constraints, the sheer size of the population and high relative incomes and costs of living, New York housing is some of the most expensive in the nation. Since the post WWII era, New York City and State have enacted a variety of rental and capital subsidy programs and built capable public institutions to deliver a wide mix of low- and middle-income affordable housing.

13. Is affordable housing correlated to other multi-family development? For example, if Houston multi-family supply is growing at 8%, can you infer anything about affordable housing development?

Yes and no. Affordable housing is market driven and correlated with the conventional multifamily market to an extent. As I mentioned earlier, there exists a structural supply deficit for affordable housing, the market is unable to deliver housing at a cost that is affordable to low-income populations, hence the need for government intervention in the market. But at the height of affordable housing production around 2018, the US was creating 150,000 new units in a year and limited by the public subsidies available. The conventional market has fewer constraints on supply and in frothy periods delivers too much supply. But population and job growth in a city or market that spurs conventional higher income multifamily supply also is a catalyst for lower income housing demand as well.

14. Why can't cities just issue municipal debt to spur affordable housing development?

Cities issuing "essential purpose" municipal debt which would be tax-exempt does not provide enough of a subsidy to deliver new construction affordable supply. Unlike Private Activity Bonds which generate automatic 4% LIHTCs that fund 35% - 40% of development costs, traditional General Obligation municipal bonds backed by the full faith and credit of the city issuer would lower the cost of the debt capital by 100 or 200 bp but this is not enough of a capital subsidy to generate new affordable units.

15. Are there any initiatives in the Inflation Reduction Act of 2022 relevant to affordable housing?

There is only one relatively small direct effort in the IRA for affordable housing, roughly $800 million to improve the energy efficiency and resiliency of affordable housing.

16. Has the Opportunity Zone program of 2017 changed your markets?

OZs have had little impact on government subsidized affordable housing. With LIHTC housing, the equity owner is a partnership where the Limited Partner is typically a bank who lacks an investment portfolio with meaningful capital gains. Also, the subsidized cost of capital that OZs may generate is shallow and unable to bridge the gap between high housing costs and low tenant incomes.

17. Are there any potential policies to help repurpose/rehab buildings where there may be over supply in some areas, such as offices, shopping centers, or hospitality assets?

The built-in flexibility and market orientation of the U.S. affordable housing finance system allows for the type of repurposing opportunities you mention. However, in the highest cost markets where the need for affordable housing is greatest, these non-residential real estate assets typically get repurposed as higher end market rate multifamily as opposed to affordable rental. An affordable developer typically cannot compete with a market rate buyer for the acquisition and adaptive reuse of obsolete property types like office or retail.

18. Are affordable housing buildings subject to the same property tax risks as any other residence type?

Yes, however the risk of unexpected property tax increases is more muted for affordable multifamily housing. In many taxing jurisdictions, affordable housing receives partial or full property tax exemptions. If an affordable property is on the tax rolls, the assessed valuation typically takes into account the long term rental restrictions enforced through a recorded regulatory agreement, minimizing big swings in market valuation.

19. Has the interest in ESG investing changed the space?

Yes. More institutional investors who have not participated in the affordable housing market (primarily non taxpayers such as pension funds, foundations and endowments) have spent the time to better understand the complexities of the housing finance system and realize that the risk adjusted returns in affordable housing are attractive and less correlated to other real estate asset classes. I am proud that Systima has taken a leadership role in educating the institutional investor market on the value of affordable housing (both financial and societal) and that we have brought prominent U.S. and overseas pension funds and institutional investors to the space.

20. Can you sum up some reasons why the risk adjusted returns in affordable housing are attractive and less correlated to other real estate asset classes?

Great investors invest with the knowledge that economic fundamentals and value eventually prevail. It may take a long time, but fundamentals win in the end. The value driver that affordable housing benefits from is a persistent and dramatic supply/demand imbalance that is structural. Over the last 50 years, major housing supply constraints coupled with weak income growth for low- and middle-income households have made housing for these Americans unaffordable. Housing is the single greatest consumer expenditure by category at typically over 30% of total spending, two times the next expenditure category of transportation. While higher income households spend less than 30% of income on housing, low-income people can spend 40% - 70% of income on housing, constraining their ability to save and invest.

Without unprecedented government subsidies to build more affordable housing as well as significant changes to local land use and entitlement practices, the market cannot produce housing that is affordable to meet demand. Thus, a subsidized apartment unit with rent that is typically 20% - 30% below the market is highly valuable to an eligible renter. During the Great Financial Crisis (GFC), you saw little change in occupancy even in the depths of job losses and market meltdowns. The physical occupancy rate was remarkably steady at 96% - 97%, throughout the GFC. As an affordable housing investor, this can translate into stable and predictable cash-on-cash returns with a risk safety net in economic downturns. Investors are still able to capture upside and higher returns because rents can grow with Area Median Income or market rent growth. Therefore, affordable housing is less correlated to other commercial real estate property classes, providing institutional investors a hedge to their real estate holdings.