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The role of social capital in economic development: a proposed research agenda based on moving theory to practice

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Introduction

Over the past 30 years, researchers have developed a strong, active, and expanding body of work on what social capital is, how it functions, and its positive impact on individuals and communities. The field has advanced, and now, important findings on its role in economic development are being explored. What direction should future work take?

Economic development describes observable increases occurring in the economic well-being of an area's residents. How well-being improvements are manifested and observable can vary, but they frequently include upward changes in the level and distribution of an area's employee and per capita income (Wolman and Spitzley, 1996). We need to acknowledge there are a number of related theoretical frameworks within the economic development field already, such as network theory (see Breza et al., 2019), cluster theory (see Porter, 1998), and collective action (see Reisman, 1990).

While all of these relate to "connections" in general in an economic context, Ostrom and Ahn suggest, "In sum, the social capital approach improves the knowledge of macro political and economic phenomena by expanding the factors to be incorporated in such knowledge and by constructing richer causality among those factors, and by achieving these without dismissing the insights from neoclassical economics and rational choice theories" (Ostrom and Ahn, 2009). Social capital networks represent a richness in understanding the roles of connection and relationships. Yet, even after decades of work on its nature, we don't have a clear consensus on what it is or how it can be used in an economic development framework.

In this chapter, we recognize that there is a social *network effect* in economic development that is separate from the direct use of social capital. We use the term “social capital network” to refer to the effect of using *social capital within and across these social networks.* The benefit of a network effect is derived from its size or scale. On the other hand, the social capital effect emphasizes the positive outcomes that arise from social connections within the network. Depending on the policy or strategy in question, development efforts may thus be able to leverage social capital networks in ways that enhance economic outcomes. This is reflective of an emerging literature that outlines social capital networks in terms of their use by governments and/or NGOs (see Shrestha, 2023; Vonneilich, 2022).

Going forward, institutions formally tracking social capital networks and how they can be used to promote economic development will need to draw from a set of readily operationalized social capital definitions. One candidate appearing frequently in the literature is the now commonly known bridging and bonding social capital network typology. However, there remains a great deal of dialogue around the need for additional types or subcategories (Jackson, 2020). For instance, typical conceptualizations of bridging and bonding do not capture nuances around power differentials. While the idea of a third “linking” category is now decades old (Szreter and Woolcock, 2004), there is still disagreement on whether the concept might be a subcomponent of the bridging and bonding typology (Rubin, 2016). A robust definitional framework encompassing the rich complexities of social capital networks is certainly needed but must be balanced against the needs of practitioners to operationalize and measure their use of the concept.

Recent advances in social capital theory and its applications have been limited mostly to theory. Quantifiable progress on practical implications often lacks consensus. New articles include language pointing out a positive finding followed by the phrase, “However, the relationship between…” or “But while X capital is positive at this stage, it becomes a barrier when…”.

Such nuanced findings will move the field only so far. The opportunity to move social capital research beyond theory and into new areas of research is the opportunity to advance miles. For instance, we note that research on social capital application in the fields of business, management, and economics now overshadows its application in medicine, sustainability, and traditional social science, in that order (Carradore, 2022). We note, particularly, an opportunity to build on recent works to explore the value of using social capital in the pursuit of economic development (Bathelt and Cohendet, 2014; Lizhi et al., 2021; McCall et al., 2021).

We have identified four principal areas for such future research:

1. the theoretical basis of using social capital to promote economic capital and, if acceptable,
2. the ability of government to successfully facilitate such transactions and, if possible,

3. the way to use social capital to expand economic activity in a sustainable way and, if impactful,
4. the consideration of social capital given changing concepts of technology and geography.

As a base for our discussion, we reviewed over 100 academic research articles and reports from 2003–2023, as well as selected key prior works, including generalizable items directly addressing the use of social capital in economic development at the regional and/or local level.

Research need 1: theoretically, can social capital be used explicitly as an economic development tool at the regional level? If it can, should it be?

Many authors demonstrate a link between social capital and economic development, but few have explicitly engaged social capital as an element of economic development planning or implementation, particularly at the regional level (Engbers and Rubin, 2018). Economic development practitioners rarely use the term "social capital", but their strategies often align. Social capital may be most effective in the preliminary stages of regional economic growth efforts. Economic development, in turn, may contribute to developing more social capital. Bonding, bridging, and linking social capital in communities are all thought to attract economic development, although the value of bonding capital is most limited. Before proposing specific areas for future research, we approach our proposed research agenda by asking two questions. First, can social capital be conceptualized, developed, and marketed as a resource for promoting economic development? Second, what are the ethical considerations presented by such an approach?

Social capital as a regional asset fostering private sector innovation

> Regional innovation networks transform technology into competitiveness of firms and thus contribute to economic development. ...innovation is a process of collaboration for mutual benefit... The outcome of this process depends on how smoothly firms collaborate, and this is where regional social capital ...is of crucial importance (Rutten and Boekema, 2007).

Social capital advances economic development as it develops networks of innovation in regions. Mutually beneficial institutional and individual relationships, and their reduction in transaction costs, appear to be the key (Feiock, 2009; Rutten and Bokema, 2007; Erselcan, 2011). While the basic logic seems clear, there are multiple challenges in assessing timing, firm development stages, advantageous fit in terms of product or service type, number of firms, and the capacity and social capital assets of the individual actors involved.

In terms of timing, development, and fit, it's unclear how closely aligned firms need to be. For a technology firm, seeing an area as a good location may mean seeing other technology businesses as working on issues, products, or services that build on, or expand the value of, their own products without direct competition. This is in line with economic cluster theory (Wolman and Hincapie, 2015).

Implications for future research agenda: moving social capital theory to practice – can it be done?

What is the nature of current social capital use?

Many studies ask whether social capital levels are associated with economic growth. Yet much more needs to be done to understand the mechanisms linking the two. One might ask if social capital is already being used as an economic development tool by practitioners at the local and regional levels but perhaps not acknowledged as such, including BRE (business retention and expansion) efforts, sponsored local and regional networking events, such as those organized by chambers of commerce or business alliances, or through technical assistance, which can involve connecting entrepreneurs with investors. Do all these efforts fall within the definition of creating and using social capital to advance economic development?

What are the boundaries on social capital impacts?

Clearly, social capital can be used as an economic development tool. The evidence points to the strategic positioning of actors in the region working in collaborative, mutually beneficial endeavors. In situations where innovation in a region is allowing all boats to sail, more can enter, and the harbor is not so crowded that you lose sight of all the boats or need to close the harbor. Based on the work described above, to move from theory to practice, we suggest the first item for future research is a broader and deeper understanding of the positive effect social capital can have on economic development. In particular, we need to identify if social capital's impact is best achieved through quantity or concentration. What boundaries limit its applicability?

What are the implications of social capital's value to innovation?

In the general example provided above, the importance of timing and alignment for social capital development and use seems somewhat flexible. For application to a technology-based economic development agenda, for example, things may not be so straightforward. Firms may have needs at particular times speaking to a high return for social capital networks to be developed and supported, leading to collaboration for mutual benefit. Once the "innovation" takes root, does a relationship between institutions fade? Are networks based on innovation short-lived by definition? More questions follow these. How is the impact due to social capital networks measured? Is its impact bounded? What is a theoretical breakpoint? Is it when rewards start to lessen (on the downside of the benefit curve) or when they actually turn negative? How does the value of social capital in these circumstances compare to the value to innovation of ways to promote economic development? For example, is access to talent more important?

How important is network capacity to the viability of accessing social capital as an economic development tool?

Network capacity concerns arise when the number of actors increases. Do organizations have to have a certain level of internal capacity for relationship-building before social capital can trigger its reinforcement and expansion into external networks? If so, is that vested in individuals in certain positions, and, if so, would social capital-building efforts produce the best results by targeting those individuals? One could argue social capital benefits drop off if there are too many actors, especially in the case of bonding social capital. At what point does the network become too large to provide mutual benefits? Is there a tipping point where the social capital network capacity is reached, new firms start competing for entry, and, particularly with bonding, social capital networks turn protective of economic development rather than stimulative? Finally, is there a minimum level of social capital that must exist before efforts to build or use it can be employed? If it doesn't exist, are there preconditions necessary for introducing it?

As an economic development tool, what is the role of social capital investment in a local or regional space vis-à-vis financial and other forms of capital?

Over the past three decades, most researchers have focused on isolating its specific impact from and relationship to other socio-economic forces (For example, Paarlberg et al., 2017). However, theory needs to take a step closer to application by exploring its relative impact compared to other economic development strategies available to local and regional officials. A first step has been taken with the impressive research of Kobeissi et al. (2023) using data from over 3000 counties in the United States. The researchers focus on social capital's contribution to innovation in private firms. What stands out for further research is their consideration of social capital alongside human capital, financial capital, research and development expenditure, etc. Practitioners need to understand the value of using social capital as one of a set of possible economic development tools, not in isolation. Which of these promises the highest return in their local/regional context? Decision-makers may be less likely to adopt social capital-oriented approaches to economic development without understanding its relative impact.

Can we gather more generalizable, practitioner-oriented application data?

Much of the relevant research is understandably based on local or regional studies. Others are tapping into existing data-rich systems created for other uses. We need to bridge the gap between the surface-level data-rich studies now found in individual-level social capital research (such as the 10 million data points used by Norbutas and Corten, 2018) and the in-depth rich qualitative research on regional economic development clusters (Padilla-Meléndez et al., 2013; Halme, 2021). For economic development professionals to move theory to practical application, we need more information from both sources based in transferable/generalizable industry contexts.

What if an area has social capital, but no established economic development sector?

Finally, if the area has social capital, more than one actor is exchanging. However, is an economic development plan promoting access to that social capital? To use the full potential of an area's social capital, a foundation promoting economic development growth must exist.

Implications for future research agenda: moving social capital theory to practice – should it be done?

Our initial answer is yes; the key issue to consider in this regard revolves around the role of government versus the private sector in economic development. There is already clear support for government having a role; the contentious issues, in general, are in terms of the extent, impact, and the distribution of costs and benefits. The issue of government development and use of social capital for economic development purposes raises additional concerns and questions—questions we feel should be addressed in future research.

Does promoting social capital development put government in the role of choosing winners?

Government support of social capital development and use as an economic development tool will have capacity limits, which raises obvious research questions on who benefits from the government's involvement in creating social networks. A regional approach may sidestep some of the trickier potential ethical issues of active government pursuit of stronger bonding relationships across certain groups within an individual community, and prior research has shown limits to the positive benefits of bonding regardless. What relevant prior theoretical work on the role of government from economic development literature could be re-examined from a social-capital perspective? How do we incorporate equity into such analyses? And how might it impact the overall economic performance of regions or communities? Can measurable indicators be used to assess the effectiveness of government initiatives in this regard? Research in this area can help inform the design of policies striking a balance between fostering social capital and ensuring equitable outcomes.

What is success in terms of using social capital to support economic development?

Local and regional efforts to productively use social capital tools to promote economic development will not exist in a vacuum. Whether public or private, these efforts will have to be considered alongside other economic development tools for funds and support or show they are of value in conjunction with the other approaches. It's not enough for scholars to show this is a valuable tool in theory. Local and regional officials will need to decide if it's the best tool given the local/regional context. How might scholars help practitioners frame what successful uses of social capital are?

Research need 2: practically, could institutions (government, non-profit organizations) capture the benefits of "organic" social capital in formal economic development structures, policies and practices?

For practitioners, there are three primary challenges to incorporating social capital as part of their organization's formal economic development structures, policies, and practices. While not insurmountable, these issues suggest a need for scholars to consider how to best "translate" the theoretical possibilities of social capital benefits into actionable pathways for development institutions. The three issues also frame a series of specific questions future research should address from an application perspective.

The financial aspect: direct investment in social capital creation

While the constellation of social and economic variables working to foster (and/or damage) social capital are well outlined by the literature (Cordes et al., 2003), it's harder to understand if, and if so, how, social capital development depends on financial support of some kind. For practitioners, most economic development strategies require some form of public sector funding, and research has shown spending by public entities is usually correlated with higher levels of social capital (Kay, 2006).

It's also important to note that public spending is not a sufficient condition for social capital creation. For government spending to positively shape social capital, it must occur concurrently with the development and/or support of civil society institutions (Fukuyama, 2001). Yet other analyses show that if local government spending levels in the United States' southern region were the same as those in the nation's northern region, aggregate social capital levels in the southern region would decline (McCall et al, 2021). To move social capital theory to practice, we will have to have a better understanding of the need for and role of local and regional financial support.

Institutional capacity to foster and support social capital building efforts

It's unclear what subset of organizations could craft or execute a coherent, applied social capital-based economic development strategy. Part of social capital's potential comes from its ability to adapt and thrive across different types of geographic and digital spaces. As noted above, this can be something of a double-edged sword. Variation in what affects social capital stores (as well as how social capital affects development outcomes) means there can be no prescriptive strategy that will work for most organizations.

Yet the need to create a "customized" strategy in this area is a problem for civil society institutions because it will draw on chronically low-capacity levels (Trzcinski and Sobeck, 2008; Taylor, 2000). Low capacity is often thought of in financial management terms, but for public institutions, this also includes likely deficits in political, programmatic, and network resources (Shrestha, 2013; Nye and Glickman, 2000; Berner et al., 2019). In addition to the capacity needed to create a localized strategy, use of and access to social capital *also* carries a capacity cost. For example, research on community development corporations shows a requisite capacity level is needed to gain the capacity-building benefits of social capital networks (Williams et al. 2022).

Though these barriers and challenges are multifaceted, they point toward one overarching implication: at present, there are few ready-made "blueprints" entities can use to incorporate social capital into their economic development activities.

Legal context for using social capital in economic development strategies

Public institutions wishing to develop, use, and support social capital as an economic development tool must do so in the face of political interaction and legal constraints (Rusten and Bryson, 2010). Other research, such as Paarlburg et al. (2018) and Kim et al. (2020), both using local level data, has shown income inequality and racial diversity have a complicated relationship with social capital in a community. If government or other formal institutions engage in promoting social capital development for economic development purposes, what social, legal, and institutional challenges may follow?

Implications for a future research agenda: practically, could institutions (government, non-profit organizations) capture the benefits of "organic" social capital in formal economic development structures, policies and practices?

Are there ways to measure the current use of social capital in economic development strategies more comprehensively, moving beyond local, regional, or industry specific case studies and examples?

For instance, is it possible to construct an organization-level blueprint for measuring factors enhancing social capital used in economic development at a local or regional level in ways that mimic Chetty et. al.'s use of social media data at the individual level (Chetty et al., 2022)?

What are the financial and institutional capacity ramifications when using social capital in economic development strategies? Can these strategies be incorporated into current efforts?

Economic development efforts compete for limited public funds. One recent study's title, "Everything but the Kitchen Sink? Factors Associated with Local Economic Development Strategy Use" (Morgan et al., 2019) reflects how researchers are only now grappling with understanding the application of different economic development strategies. In many countries, local government funding and human capital capacity have declined (Muldoon-Smith and Sandford, 2021). Do local and regional governments have enough of the necessary human capital skills and personnel to implement a social capital strategy? We need to move beyond the question of *if* social capital works to *if and how practitioners can make it work* to their own communities' advantage.

What fundamental legal, political, and institutional concepts and/or environments must be considered in developing social capital-focused economic development policies and practices?

As with any other approach to economic development, using social capital as a tool will have to work with existing legal, political, and institutional frameworks and standards, and this is not easy (Pooe, 2019).

What levels of government are active in this space around the world? In what shared capacity and to what effect?

Some may assume that because we are talking about local and regional economic development, the responsibility for building and using social capital should also fall to those levels of government. However, in the United States, some are also calling for more active participation at the national or global regional levels to promote/support local and regional efforts through agencies such as the U.S. Economic Development Administration, the European Union Committee of the Regions, and the World Bank (Muringani et al., 2021; Liu et al., 2022; World Bank, 2021; Schneider et al., 2000). The issue of who does what is especially important in the context of our next section—promotion vs. protection.

Research need 3: social capital's role in sustainable development: is it possible to both promote and protect?

The process of using social capital networks to drive sustainable economic development can be seen at two levels: 1) existing at a community level, which is attractive for existing businesses and new businesses wanting to locate and invest in a relationship-rich geographic space, and 2) social capital developed at the intra- and inter-firm levels, where businesses want to foster internal relationships leading to collaboration, innovation, mutual advancement, and economic growth (Cooke and Wills, 1999). One might see these two as, first, the existing social capital which brings business to town, and second, the new, industry-specific social capital fostered and used internally once there. Ideally, this is a positive, self-reinforcing system. Does the ideal actually match reality? A major area for additional research is centered on the long-term impacts, reverse impacts, and systems impact (see Pillai et al., 2017 and Staw, 1976; 1981) rather than the simple capital-to-growth connections dominating current research.

These are not questions specific to social capital, but their application to social capital for economic development purposes seems different. Significant work is being done on social capital's influence on economic development, but very little on the potential reverse connections. Social capital is not a commodity protected by formal bureaucratic structures or rules, such as one may find with land preservation or local clean water ordinances. Is social capital a finite resource that can be drawn down or replaced? If so, what are the long-term impacts? If negative, could those negative impacts be prevented or mitigated?

Implications for a future research agenda: social capital's role in sustainable economic development – is it possible to both promote and protect?

What is the nature of the link between local or region-wide social capital and the social capital used within industry/business economic development efforts?

Much of the literature featured here focuses on either how local and regional social capital is attractive to economic actors, or how *within* industries or industrial clusters existing in local or regional areas, social capital relationships can spur innovation, mutual support, and productivity. Is there a connection between these two foci, or are we considering them as part of a single research agenda as a convenience? We tend to use data to examine them as separate processes, yet we also speak of the role of social capital contributing to economic growth as a single phenomenon. What is the relative impact of each, or the combined impact if social capital can be fostered in both environments? Is there a clear link between the two?

If there is positive reinforcement between social capital and economic growth, does it have a limit? At both the local/regional level and within business, is there a point where the net benefits due to social capital relationships decline, or even turn negative? Some authors are already challenging the idea that trust leads to positive economic growth (Roth, 2007). In contrast to the potential positive relationships implied above, one could argue that economic growth leads to the displacement or disruption of social capital networks at the community level, threatening the community characteristics attractive to businesses in the first place. Is there a point where the system strains the linkages or even damages the underlying fabric of relationships? Boon and Farnsworth (2011) present evidence that for those living in poverty, translating social capital networks to take advantage of economic opportunities is complicated, with multiple barriers for individuals being able to access new economic resources. If growth increases housing demand, local food prices, puts pressure on transportation, and access to health care or education, will there be pressure on the social networks that initially fostered growth?

Within a business/firm context, if social capital relationships decline, which facet of this relationship bears the burden of that decline, when, and how? For example, what is the shape of the curve of net return on social capital relationships through the life cycle of a firm or industrial cluster development?

Is there a point where the value of building social capital networks tips from positive to neutral or even negative? Much of the literature points to specific points in business development where the value of social capital is high. This implies that there are stages of business development where it's low, or perhaps inconsequential. Current research also emphasizes the value of social capital networks to innovation development. What is the value of social capital relationships when firms move beyond the innovation stage? What is the lifetime of social capital relationships within business enterprises?

Can social capital at the community level be "drained" or depleted, directly or indirectly, by economic growth? If so, how? Can the displacement of social capital networks be prevented?

Researchers have attempted to measure the level of overall social capital in communities. In fact, studies often look for areas with greater or lesser levels. The research implies actions can be taken to build the "stock" of social capital, and the question above asks about the growth curve of such efforts. However, can local factors or actions actually spur negative growth, or a net loss of social capital? What mechanism could use social capital to promote economic growth while protecting the "stock" of the underlying social capital relationships? How does social capital building in the pursuit of economic development deal with other worthy applications—those outside of economic development such as environmental, community-oriented, education, etc.?

Research need 4: bridging, bonding, linking … and zooming? What is the role of geography in social capital/economic development research, especially in the age of anytime, anywhere connections?

As noted in the preceding sections, there is general agreement on the definition of social capital as the benefits to be derived from social connections; however, scholars differ on the types of advantage, and the social capital literature distinguishes between what might be called a school of cooperation versus a school of competition (see, for example Anthias, 2007; Julien, 2015; Morrow, 1999; Smith and Kulynych, 2002). These distinctions are particularly important in considering the ways social capital affects the economic development of communities, and they are complicated by the growing connections in society facilitated by the internet.

Online environments where individuals interact, communicate, and form relationships have proliferated with the rapid advancement of technology. As communications have shifted towards the digital domain, new questions about the value derived have arisen. Current academic debates center around whether online social capital gained through personal digital media platforms is replacing local, tight-knit communities, or if virtual connections are extensions of real-life relationships and provide support to local communities (Gil de Zúñiga et al., 2012). The latter mirroring view sees online social capital as a reflection of offline social capital (Wellman et al., 2002). Proponents claim the benefits derived from social capital are the same in face-to-face as in virtual life (Lin and Erickson, 2008). The replacement view, in contrast, sees a significant change in how people interact with others and argues online social capital differs substantially from its offline counterpart (Nie, 2001; Van Dijk, 2005; Boyd and Ellison, 2007; Baym, 2015).

Virtual spaces: a new frontier for social interaction

Questions about how social capital might evolve in the internet age have long loomed large (Norris, 2002; Sajuria et al., 2015; Tiwari et al., 2019). Social capital manifests itself in a variety of ways in virtual spaces. First, individuals build social networks by joining groups within these virtual environments. These affiliations create platforms fostering a sense of belonging and shared identity. Second, trust, an essential component of social capital, emerges as individuals interact and engage in collaborative activities. Third, virtual worlds provide opportunities for individuals to engage in reciprocal behaviors. These acts of reciprocity strengthen social ties and contribute to the accumulation of social capital. Fourth, the persistence of virtual worlds enables the formation of long-term relationships, allowing individuals to build trust and cooperation over time. Finally, by transcending geographical boundaries, virtual spaces enable more interactions between individuals from diverse cultural backgrounds. Economic development is multifaceted in virtual worlds, including entrepreneurship, digital labor, and virtual asset trading. Social capital plays a significant role in each of these domains.

Virtual entrepreneurship involves individuals creating and managing businesses within virtual worlds. These businesses range from selling virtual goods to offering services. Social capital enables entrepreneurs to form partnerships, attract customers, and access resources through their social networks. The trust developed fosters the growth of customer bases and enhances the reputation of these virtual businesses.

Digital labor refers to tasks performed within virtual worlds. Social capital is essential for acquiring clients, building a strong reputation, and ensuring repeat business. Additionally, virtual labor markets rely on trust to prevent fraud and ensure fair compensation. Virtual asset trading involves the exchange of virtual goods and currencies for real-world money. In this case, social capital contributes to the establishment of reliable trading relationships and the creation of trading networks. Trust is paramount in preventing fraudulent transactions and maintaining the integrity of the virtual economy.

There are two competing arguments considering the consequences of these emerging ways the internet supports social capital and economic development. The leveling argument suggests the internet favors disadvantaged places and people by giving them access to types of social capital previously reserved for the advantaged (Donath and Boyd, 2004). On the contrary, the deepening inequality argument suggests the stubborn digital divide is reinforcing social inequalities, enhancing the instrumental use the advantaged have traditionally made of (weak) ties, and strengthening the social segregation of the disadvantaged (Nie, 2001; McPherson et al., 2001).

Acknowledging the multifaceted relationship between geography and social capital can guide policies and interventions aimed at fostering vibrant, connected, and equitable societies.

Understanding the role of geography in social capital has significant policy implications. Policymakers can leverage geographical contexts to promote community development and social cohesion. Investment in public spaces, community centers, and urban planning can facilitate interactions and strengthen bonding social capital. Efforts to bridge urban-rural disparities can be informed by recognizing the importance of accessible networks for economic development.

Implications for a future research agenda: can social capital promote economic capital within a changing sense of geography?

Does the bonding capital gained from geography and proximity only create place-based economic development?

Geography plays a pivotal role in the formation of bonding social capital, characterized by strong ties among individuals within close-knit communities. In local settings, physical proximity facilitates face-to-face interactions, enabling trust and shared norms, frequent encounters, and enhancing opportunities for mutual support and cooperation for organizations. Individuals who reside in the same neighborhood or community are also more likely to engage in reciprocal behaviors, exchange resources, and form enduring relationships. Does this type of social capital create meaningful economic benefits at the community level for individuals?

What is the relationship to geography and proximity to bridging capital?

Geographical factors also influence bridging social capital, determining the accessibility of social networks beyond one's immediate surroundings. Urban centers, for instance, tend to offer more diverse social networks. Regional higher education institutions can play a role (Padilla-Meléndez, Antonio et al., 2012). These connections foster exposure to different ideas, perspectives, and opportunities, contributing to innovation and resource mobilization. Research suggests bridging capital results in economic benefits to individuals and communities, particularly in areas with strong entrepreneurial clusters. Which bridging strategies result in economic development under the cooperative or competitive theories?

What is the relationship of geography and proximity to linking capital?

Linking social capital involves connections between individuals and institutions or organizations with more power, resources, and influence. These connections create pathways for individuals and communities to access external opportunities and resources. It provides marginalized communities with access to external resources, institutions, and networks that can facilitate economic development. Also, strong linking social capital allows communities to influence policies and decisions affecting their economic prospects. Connections to policymakers, government agencies, and advocacy groups can ensure the needs and concerns of communities are considered when formulating development strategies. Access to international networks and partnerships can lead to export opportunities, foreign investments, and technology transfer, driving economic development on a larger scale. Again, the research does not make clear the specific linking strategies boosting economic development.

How do digital spaces affect the current relationship between rural–urban divides and social capital disparities?

Urban areas are noted for providing greater opportunities for diverse social connections, while rural regions are more often expected to experience challenges in accessing external networks. The rural–urban divide can lead to disparities in social capital, limiting rural residents' exposure to new information and resources. This divide is said to exacerbate inequalities in education, employment, and overall well-being between urban and rural communities. That said, many rural areas have thriving economies, suggesting other forms of capital may play a stronger role in developing rural areas. Further research is needed to confirm this is true. Will research also suggest that digital-based social capital further levels the playing field for rural areas?

What is the relationship between digital spaces and social capital?

While digital spaces can enhance bridging social capital, they also pose challenges, such as the potential for reduced face-to-face interactions and the risk of creating echo chambers reinforcing existing beliefs. How do digital spaces facilitate economic development in entrepreneurship, digital labor, and virtual asset trading? What are the implications under the leveling and deepening inequality arguments?

Do offline and online formats of social capital-based economic development mirror each other?

Social capital connections do not have to be geographically bounded, but research is rife with examples featuring community-based, local benefits. At the same time, place-based effects have not been observed when assessing endowment levels across metropolitan versus non-metropolitan communities. Additionally, in an increasingly virtual world where social connections often start and stay online, research also suggests social capital's effects differ across digital neighborhoods (Zhang and Sung, 2023; Wolf and Theunissen, 2023). Is it safe to develop practical strategies for using online social capital for economic development based on research using offline experience?

The opportunities available for and barriers to this research agenda

Three major opportunities present themselves as part of this research agenda. First, there is a promising avenue for interdisciplinary research, which capitalizes on various data sources, methodologies, perspectives, and debates. For instance, the approach of using large-scale social media data to investigate social capital networks could potentially be adapted to study economic development professional networks and integrated into a comprehensive framework. Embracing interdisciplinary research not only enhances the credibility and reliability of research on the value of social capital in economic development but also enables the broader application of findings across diverse academic disciplines and geographic contexts. While our primary focus remains on economic development strategies, the insights generated may have relevance in domains such as education, health care, anti-poverty programs, climate change, or military defense negotiations, opening the door to a more extensive interdisciplinary research agenda.

Second, this research agenda addresses a critical gap between theory and practice in academia on a global scale. It places a deliberate emphasis on understanding social capital in ways that facilitate practical application. The opportunity now exists to assess the generalizability of successful instances where social capital approaches have been used to promote economic development and to confidently expand these best practices.

Third, there is an opportunity to assess the value of advanced technology research tools. We have to clearly test social capital theories. While some researchers have effectively harnessed large datasets and quantitative analysis to study social capital patterns, this approach may not necessarily provide answers to the "why" or "how questions practitioners need to transition from theory to practice. Fortunately, many social capital researchers rely on detailed qualitative data offering insights into context, motivation, and the mechanics of social capital. However, gathering, coding, and analyzing this qualitative data can be time-consuming. Emerging tools, such as AI, may soon facilitate quicker coding of interviews or streamline the analysis of qualitative data, potentially accelerating the qualitative research process. It's worth noting we propose this as an opportunity to test the value of AI in social capital research, not necessarily as an endorsement of it, as the outcome of testing may lead to the rejection of AI's use if it proves incapable of handling the complexity of social capital research.

Nevertheless, several barriers exist. Firstly, there is a challenge in developing a consistent language. Operationalizing theoretical concepts is a challenge across all research fields, and both social capital and economic development are represented in a multitude of ways, even within national contexts, let alone internationally. The interdisciplinary nature of this research agenda may pose difficulties in developing a relatively consistent, translatable, validated, and readily applicable set of measures for various aspects of social capital. For instance, a successful longitudinal measure of social capital at the local level developed and collected by Penn State University in the United States was discontinued in 2014 (Rupasingha et al., 2006 with updates).

Conclusion

The time has come to move beyond merely demonstrating the existence of social capital theory and to start testing its application across various contexts to give the theory a more defined shape. The theories and opportunities outlined above have the potential to profoundly impact our ability to conduct this work in a manner allowing both theory and practice to evolve. We need to add substance to the theory, delineating its potential and limitations in economic development and other fields. Furthermore, for this work to have a meaningful impact on society, it must be made relevant and useful to practitioners.

In summary, we need to 1) understand the boundaries of the impact of bonding social capital, 2) explore where it can be extended through bridging, and most importantly, 3) expand the currently limited body of work on the "linking" form of social capital—precisely where the private and public sectors intersect, and 4) recognize that social capital research is inherently interdisciplinary/multidisciplinary and would benefit from the development of a common language to allow for more consensus.

In a world where the future is shaped not only by technology, funding, or finite resources but by fundamental human interactions, the study of social capital takes on paramount importance. We recognize some of the questions posed are more complex, speak to broad approaches to theory, and may require additional studies to explore, while others are grounded in issues of practical application, ripe for targeted, detailed interventions, study, and action-based recommendations. We have intentionally not attempted to prioritize the questions. The study and use of social capital in economic development vary around the globe. Readers will be challenged to identify the questions that can bring them closer to understanding the value of social capital to economic development based on their own context. All of us will benefit from this continually expanding knowledge base, built from little steps or great leaps.

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