



Working paper series

# Financial and Transfer Income as Components of the Regional Economic Base

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June 2025

https://equitablegrowth.org/working-papers/ financial-and-transfer-income-as-components-of-the-regional-economic-base/

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#### Financial and Transfer Income as Components of the Regional Economic Base

Robert Manduca

Abstract: Economists and geographers have long divided industries into "basic" and "nonbasic" sectors depending on whether they bring money into a region from outside or serve local demand. Traditionally, the regional economic base has been defined as traded industries that export to other regions and countries. However, traded industries are only one way in which money enters a regional economy. Here I show that two other sources, government transfers and financial income, form a major component of the basic sector in the United States. In 2022, transfers accounted for more than 40% of the economic base of US regions, while financial income contributed another 26%—each more than traded industry earnings, which contributed just 24%. In some parts of the United States, especially retirement destinations, transfers and financial income make up more than 90% of the basic sector. The role of transfers grew over the period 2001-2022, while that of traded industry earnings declined. The economic activity in every city or region can be divided into two categories. One category, often termed "the economic base" by researchers, brings money into the region from the outside world, for instance when farmers sell their crops on the national market, or a manufacturing plant exports its products worldwide. The other category, called the "local sector," circulates that money within the region by providing goods and services to residents—for example, a mechanic who makes her living repairing farmers' tractors, or a restaurant where manufacturing workers eat lunch.

Traditionally, researchers have identified export industries with the economic base, seeing them as the central engine of regional economies. Local sector industries employ the majority of workers, but ultimately depend on the outside money that export industries bring in (Moretti 2010; Porter 2003). However, sales of products from export industries are not the only way in which money might enter a region. Two other major sources of income also form part of the regional economic base, bringing in money from outside the regional economy that can then circulate within it. These are financial income—dividends and interest received from ownership of companies or financial assets located outside the region—and transfer income—payments to individuals from national or state governments.

Like traded industries, financial income and transfers provide flows of money that originate outside the region, and which, once received, will circulate within it as they are used to purchase goods and services from local industries such as grocery stores or home repairs. But although researchers have periodically acknowledged the potential role that non-wage income can play in regional economies, and occasional estimates have found that accounting for transfers or financial income can dramatically alter the size of estimated employment multipliers (Gibson and Worden 1981; Milano and Talandier 2025; Mulligan 1987; Nesse 2014), comprehensive national analysis of the role that unearned income plays in the economic base of regions is lacking.

In this paper, I use data from the Bureau of Economic Analysis Regional Economic Accounts to document the contribution of financial and transfer income to US metropolitan areas and rural counties over the period 2001-2022. I show that earnings from private, traded-sector industries—the exclusive focus of most economic base research accounted for only a minority of the US economic base during this period: 36.2% in 2001, falling to just 24.1% in 2022. Income from transfer programs (primarily Social Security, Medicare, and Medicaid) made up a much larger share, 40.9% in 2022. A full 270 million people, more than 80% of the US population, lived in metropolitan areas or rural counties where transfers formed a plurality of the economic base in 2022. Financial income, at 26.2%, also contributed more than traded-sector earnings, while another 8.9% of the economic base came from state and federal government earnings. The importance of different sources of economic base income varies around the United States. Traded industry earnings are most prominent in agricultural areas of the upper Midwest, as well as some major metros such as San Francisco, Boston, Seattle, and Houston. Financial earnings dominate in south Florida and resort communities in Colorado and other Mountain states. And transfer income predominates in many rural areas forming an outright majority of basic-sector income in almost 900 distinct metros and counties across the country, with a combined population of more than 46 million residents.

Acknowledging the extent of financial and transfer income changes our understanding of what the economic base is and where it comes from. Traditional accounts focused on employment describe how export industries provide the economic foundation for a region, but local industries provide the bulk of employment. But when transfers and financial income are accounted for, the split is more equal: roughly half of all income accrues within the economic base, while half is generated in the non-basic sector. Non-basic income makes up a greater share of the economies of large regions compared to smaller ones, perhaps because the scale of these metros allows more industries and firms to survive based on demand from within the region alone.

#### Background: Economic Base Theory and Empirical Research

The concept of a regional economic base dates to the early 20<sup>th</sup> Century, and is a foundation idea in the analysis of urban and regional economies (Blumenfeld 1955; McCann 2001; Sombart 1916; Thulin 2015). The theory posits that economic activity within a given economic region—typically a metropolitan area—can be divided into two main sectors. Activity in the "basic" sector, sometimes called the "traded" or "export" sector, brings money into the region from outside, for instance by selling locally manufactured products in markets elsewhere around the country or the world. This money then circulates in the "non-basic", "non-traded", or "local" sector, which is devoted to meeting local needs and provides the bulk of employment (Porter 2003). Importantly, economic activity in the basic sector (a region's "economic base") provides the ultimate foundation for the employment and prosperity enjoyed by workers in both the basic and non-basic sectors.

A classic example considers a copper mining village (Blumenfeld 1955). The mine itself is the economic base, producing a commodity that is sold on national or global markets and brings money into the town's economy. Demand from the mine workers supports grocery stores, restaurants, housing construction, K-12 education, and the other local services that meet the needs of daily life. Most of the town's workers do not work in the mine, but they are still ultimately dependent on its continued existence: without the money brought in by the mine from outside, there will not be demand for their own products and services.

Because of the way that money from the basic sector circulates through a regional economy, a given expansion of a region's economic base will drive additional expansion in the non-basic sector, meaning that the total effect of an exogenous change in the economic base may be larger than the initial shift. A large literature in urban economics and regional science, dating to the 1930s (Hoyt 1941; Kahn 1931), has sought to estimate the size of these regional multiplier effects, typically by estimating the elasticity of employment in the non-basic sector with respect to a given employment change in the basic sector. Recent estimates of local employment multipliers generally range from 0.5 to 2 additional local-sector jobs created for each new job in the traded sector (e.g. Bartik and Sotherland 2019; Moretti and Thulin 2013; Osman and Kemeny 2022; Van Dijk 2017, 2018), although some estimates are as high as 5 additional jobs (Moretti 2010).

Another longstanding area of research has sought to simply identify which portions of a given region's economy form its basic sector (e.g. Hartshorne 1936). In recent years researchers have generally used large-scale datasets to classify industries (usually operationalized as NAICS industry codes) as traded (basic) or local (non-basic), based on their spatial distribution of employment: industries where employment is concentrated within a few regions are deemed to be traded, while those whose employment is widespread are determined to be local (e.g. Delgado, Bryden, and Zyontz 2014; Faggio and Overman 2014; Jensen and Kletzer 2005; Lynch and Manduca 2024; Markusen 1986).

# Moving beyond earned income

One shortcoming of most previous economic base research is its focus on industries and earned income. Most studies have measured economic activity using employment counts, limiting themselves to only that portion of the economy that involves employees. Occasionally, total wages have been used, but this once more limits the focus to earned income. Unearned income—income from property ownership and from government transfers—has generally been excluded, despite concerns that this biases estimates of employment multipliers upward (Gibson and Worden 1981; Mulligan 2010; Thulin 2015).

The importance of transfers, especially in rural areas, has been noted periodically (Hirschl and Summers 1982; Mulligan 1987; Nesse 2014), but unearned income has not been comprehensively incorporated into economic base analysis and has been largely absent from the wave of research on local multipliers over the last 15 years. Yet, as many commentators have noted, the role of both property income and transfers has grown over the last few decades. One recent study finds that transfers accounted for 18% of all personal income in the United States in 2022, up from 8% in 1970 (Fikri, Eckhardt, and Glasner 2024). The capital share of national income has also increased (Bengtsson and Waldenström 2018; Manyika et al. 2019), meaning that financial income makes up a larger share of the economy than in previous decades. Importantly, income from transfers and financial investments also disproportionately contributed to the regional economic divergence of the last 4 decades (Posey 2021).

On the rare occasions when economic base studies have incorporated unearned income, they have generally found that it accounts for a substantial portion of the economic base, and sharply affects estimates of local multipliers (Gibson and Worden 1981; James and Campbell Jr 2016; Milano and Talandier 2025; Nesse 2014; Talandier 2023). But such studies have been few and far between, and often limited to one or a handful of regions rather than an entire country.

The remainder of this paper documents the role of transfer and financial income in the economic bases of US economic regions—metropolitan areas and rural counties—during the period 2001-2022. The next section describes the data creation procedures. It is followed by descriptive findings on the prominence of financial and transfer income in US regions, and an analysis of scaling patterns by source of income.

# Data and Methods

I use data from the Bureau of Economic Analysis Region Economic Accounts (US Bureau of Economic Analysis 2025). For each county in the United States, the REA data provide estimates of "personal income" in each year, broken out into components. Personal income, the income concept used here, is related to, but distinct from, GDP or national income, and comprises a) earnings (from both the private sector and government), b) financial income (dividends, interest and rent), and c) transfer receipts. For the years 2001-2022, my focus in this analysis, earnings are available by 3-digit NAICS industry groups.

To identify earnings from traded private industries, which form part of the economic base, I use the industry categorization developed by Lynch and Manduca (2024). Their scheme assigns 6-digit NAICS industries to one of three industry market areas: local, regional, or traded. Of these, only traded industries bring money into the region from outside and thus form part of the economic base. Local industries serve local demand and consist of widely present industries such as grocery stores or restaurants, while regional industries consist in large part of business services and serve demand at the scale of a metropolitan area.

Regional industries are generally present in most metros, but spatially concentrated within each metro.

I map the 6-digit industry classifications to the 3-digit industry groups available in the REA data using employment counts from the Census County Business Patterns, as augmented by Eckert et al. (2020) to standardize geographic units over time and impute missing data. For each county, year, and 3-digit industry group, I calculate the share of all employment that was in 6-digit industries identified as "traded" by Lynch and Manduca. I then apply that proportion to the total earnings observed for that county-year-3-digit industry group in the REA data to calculate the traded earnings. The augmented CBP data are available only through 2016, after which the suppression policy was altered making it difficult to accurately impute missing values; I apply the 2016 CBP proportions to the years 2016-2022 in the REA data. As a supplementary robustness analysis, I also apply the local-traded categorization developed by the US Cluster Mapping Project (Delgado et al. 2014), which has a more expansive definition of traded industries because it does not separate out regional industries. Results using this alternative classification scheme are presented in the Appendix. As expected, the level of basic sector income from private earnings is higher under the more expansive definition, but trends are similar.

I classify earnings from federal (both military and civilian) and state government employment as part of the basic sector, since these earnings are funded from taxes raised outside each economic region. Earnings from local government employment are classified as non-basic, because US local governments are funded primarily from locally generated revenue (approximately 70% of US local government revenue is "own source"; US Census Bureau 2024).

Financial income consists of dividends, interest, and rent. At the county-year level, the REA data report the total financial income, while at the state-year level they break financial income into five components: dividends, monetary interest receipts, imputed interest receipts (for instance from insurance plans), monetary rent, and imputed rent (the rent payments avoided by owning one's own home). I apply the state-year proportions to all counties within a given state to estimate the amount of each component of financial income in each county. I include dividends and monetary interest receipts in the basic sector, since these largely originate outside a given economic region. I include monetary rent in the non-basic sector, under the assumption that most rental properties are owned locally.<sup>1</sup> I exclude imputed interest and rent from the analysis entirely, since these do not generate realized dollar payments that can circulate in the local economy.

<sup>&</sup>lt;sup>1</sup> Ideally, dividends paid by companies based within a given region would be treated as traded or local earnings (depending on the industry of the company), interest earned from loans made locally would be

Transfer income is reported across 9 categories, each of which is split into several subcategories: retirement transfers, split between Social Security and other retirement transfers; medical benefits, split between public assistance medical benefits (primarily Medicaid), Medicare, and military medical benefits; income maintenance benefits, split between Supplemental Security Income (SSI), the Earn Income Tax Credit (EITC), the Supplemental Nutrition Assistance Program (SNAP), and other income maintenance programs (primarily Temporary Aid to Needy Families and the refundable portion of the Child Tax Credit); unemployment insurance; veterans' benefits; education and training assistance (Pell grants, interest on guaranteed student loans, and other education assistance); other transfer receipts of individuals from governments; transfer receipts by nonprofit institutions; and transfer receipts of individuals from businesses (mostly personal injury liability payments). Greater detail on the component programs of each category is provided in the data documentation (U.S. Bureau of Economic Analysis 2024).

Note that the REA data assign income from Medicare and Medicaid to the county where the beneficiary lives. In most cases, the beneficiary does not personally see this income, as it is paid directly to their medical care providers. Thus, to the extent that beneficiaries travel outside their county or metropolitan area for treatment, this may result in inaccurate estimates of the income flowing to each local economy.

My primary units of analysis are Core-Based Statistical Areas (CBSAs), groups of counties identified by the Office of Management and Budget as self-contained labor markets consisting of one or more major cities and the surrounding counties from which they draw commuters. CBSAs are the most common method of identifying US metropolitan areas, which are considered by economic geographers to be the preferable definition of an "economic region" (Jacobs 1969; Storper 1997). I include counties that are not part of a CBSA as individual observations. Throughout the paper I use the terms "CBSAs", "metros," and "economic regions" interchangeably to refer to both CBSAs and non-CBSA counties. While the self-contained nature of CBSA economies makes them the best unit of analysis in most cases, in supplementary materials I provide datasets created at the state and congressional district levels, which may be appropriate for certain purposes.

For each CBSA, I calculate the total economic base income from all sources listed above. I then compute the fraction of the economic base originating within each source category, as well as each individual industry or transfer program.

treated as local earnings, and rent paid on properties owned by residents of a given region but located elsewhere would be treated as basic-sector income. Unfortunately, the data do not allow this level of geographic detail.

#### Findings

#### Sources and trends in the composition of regional economic bases

Figure 1A displays the composition of the economic base, summed across all US regions, for the years 2001-2022. It breaks total basic sector income into the four major components: earnings from private sector traded industries, earnings from state and federal government employment, financial income originating outside the region (defined as dividends plus monetary interest), and transfers. As it shows, traded industries form only a minority of the economic base—just 24.1% in 2022. Earnings from government employment provided another 8.9% of the economic base nationwide, meaning that in total, earnings comprised almost exactly one-third of the economic base of US regions in 2022. Financial income from dividends and interest made up 26.2% of the total economic base. And transfer income accounted for 40.9% of basic sector income in US regions, by far the largest component. This is consistent with recent research in Bahia, Brazil, and in France, which has found that pensions account for a plurality of basic sector income in those places (Milano and Talandier 2025; Talandier 2023).

#### [Figure 1 here]

Figure 1A shows that there have been major shifts in the US economic base over the past 20 years. In particular, the share of all economic base income deriving from transfers has grown by 40%, rising from 30.5% in 2001 to 45.9% in 2020, before falling to 40.9% in 2022. This growth occurred in two main spurts: a sharp rise after the 2008 financial crisis, which only declined moderately during the recovery, and another spike during the COVID pandemic. Concurrently, the share of economic base income from government earnings and especially from traded industry earnings declined steadily, by about 18% for government earnings (from 10.8% of total economic base income in 2001 to 8.9% in 2022) and by 34% for traded industry earnings (from 36.2% in 2001 to 23.0% in 2020, before rising slightly to 24.1% in 2022). The share of economic base income from finance has remained roughly constant at around 25%. As shown in Appendix Figure A1, the share, but not the trend, of economic base income from earnings is sensitive to the industry classification scheme used. Under the more expansive definition of traded industries developed by Delgado et al. (2014), the share of basic sector income from private earnings fell from just under 50% in 2001 to just under 40% in 2022.

The composition of the US regional economic base shown in Figure 1A highlights the importance of updating theories of how regional economies function. Traded industries are a major component of the regional economic base, but earnings from these industries are now dwarfed by transfer programs and financial income. Transfers and finance have been important components of the economic base in the US since at least 2001, but the importance of transfers in particular has grown markedly over the last two decades. In 2001, close to half of the economic base of US regions was earned income, more than three-quarters of which was from private employment in traded industries. By 2022, earned income amounted to less than one-third of the total economic base, and earnings from private, traded industries less than a quarter of the total. This replacement of earned income by transfers represents a major change in the ultimate source of economic viability for US regions.

#### Relative sizes of basic and non-basic sector income

Another important takeaway from this analysis is that the basic sector appears to be much larger, as a fraction of the total regional economy, than has been found in most previous studies focused on employment only. Most estimates are that between 15% and 30% of workers are employed in traded industries—which often stand in for the economic base in employment-based studies (Lynch and Manduca 2024; Osman and Kemeny 2022; Porter 2003). Non-basic sector industries employ the vast majority of workers, generally estimated at somewhere between 70% and 80%. This division between basic and non-basic sectors is a central tenet of economic base theory: the basic sector brings income into the region, while the non-basic sector provides employment (and, implicitly, livelihood) to most residents.

Here, however, I find that basic sector *income* forms a much larger share of the total. Figure 1B plots the share of total income from basic and non-basic sectors over time. Across the full study period, the basic sector consistently amounted to just under half of all income (and slightly over half during the pandemic years of 2020 and 2021). As shown in Appendix Figure 1B, if the alternative industry classification scheme is used, then the basic sector provides a clear majority of income throughout the study period. This likely reflects the fact that people who are employed in non-basic sector industries—and even those who are not employed at all—still receive transfer and financial income, meaning that these sources of basic sector income are more widespread than traded industry earnings.

The larger size of the basic sector that I identify when using income rather than employment suggests a revision to standard understandings of how regional economies

function. While each basic sector job has typically been understood to support *multiple* jobs in the non-basic sector (e.g. Blumenfeld 1955; Porter 2003), the analysis in Figure 1B suggests that each *dollar* of basic sector income generates roughly *one* additional dollar in the non-basic sector. The greater total size of the economic base that I have documented means that each individual source of basic sector income—and certainly each individual traded sector job—is perhaps less important to regional prosperity than previously understood.

#### Geographic variation in economic base composition

The relative importance of different components of the economic base varies widely across the United States. Figure 2 maps the proportion of economic base income from earnings (Panel A, showing private sector and government earnings combined), financial income (Panel B), and transfers (Panel C). Each of these income sources forms an outright majority of the economic base of some CBSAs and counties, while making up less than 15% of the economic base of others. Table 1 reports the most overrepresented individual industry groups and unearned income sources in regions where more than 50% of the economic base is from earnings, finance, and transfers, measured using the location quotient of basic sector income.

[Figure 2 here]

Earnings are most central in rural areas in the Great Plains and mountain west, although they also form a majority of the economic base of San Jose, CA. As shown in Table 1A, the traded industries most prevalent in these areas include nonstore retailers (including internet commerce and mail order catalogs), computer and electronics manufacturing, mining and related industries, and farming.

#### [Table 1 here]

Conversely, earnings make up less than 15% of the economic base of many other rural areas—and several large metros. Cape Coral-Fort Myers, Florida, a major retirement destination, has more than 800,000 residents, but private sector and government earnings combined make up just 7% of its economic base (financial income makes up 50%, while

transfers account for the remaining 43%). Several other Florida metros source less than 20% of their economic base from earnings, including Miami.

Financial income makes up 30 to 50 percent of the economic base of many large metropolitan areas, including New York, Chicago, San Francisco, Atlanta, and Boston. But it is most central in a number of resort communities in the mountain west: Jackson, WY (where finance contributes a full 80% of the economic base—almost twenty times as much as the recreation and accommodation industries combined); Lake Tahoe, CA; Sun Valley, ID; and the major ski resorts of Colorado (Aspen, Vail, Steamboat Springs, Telluride). Larger metros that rely primarily on financial income include Fayetteville, AR (population 576,403; home to Walmart) and several places in Florida. Fitting with this, as shown in Table 1B, the most overrepresented sources of economic base income in these regions are rental and leasing services, recreation industries, and sightseeing transportation, although dividends and monetary interest are both more than twice as represented in these regions as in the nation overall.

On the other end of the spectrum, many rural counties source less than 10% of their economic base from finance, while it makes up less than 20% of the economic base of larger metros including McAllen and El Paso, TX; and Bakersfield, Fresno, and Modesto, CA, among others.

Transfer income forms an outright majority of the economic base across a broad swath of the country, including most rural areas outside the Great Plains and interior west. Large cities where transfers form a majority of the economic base include the metros in Texas and California mentioned above, as well as Riverside, CA; Lakeland and Deltona, FL; and Memphis, TN. As shown in Table 1C, transfer-dependent regions are also heavily dependent on extractive industries, especially in the forestry sector. The specific transfer programs that are most overrepresented in transfer-dependent areas include Supplemental Security Income (LQ = 1.63), veterans' benefits (1.59), SNAP (1.58), and the EITC (1.56). Medicaid (1.48), Medicare (1.41), and Social Security (1.40) are less overrepresented but provide much larger total sums, collectively accounting for 43% of the basic sector for these regions.

The fact that earnings play a minimal role in the economic base of many regions does not necessarily mean that these regions are impoverished: there can still be robust employment in local industries such as construction, landscaping, restaurants and bars, and many types of retail, as well as local-serving professions such as most law and medicine. And indeed, the populations of Miami and Cape Coral have grown rapidly in recent decades, while Jackson, WY, has the highest per capita income in the country. But the ultimate foundation for these economies—even when they are prosperous—is external: Social Security checks, medical benefits, and dividend and interest payments, rather than goods or services produced in the local economy. Without these external transfers and investments, the prosperity of places like Miami, Cape Coral, and Jackson would dry up.

# Scaling of basic and non-basic sectors

I next consider how the non-basic sector scales with the total size of a region's economy. Figure 3A plots total income in the non-basic sector against total income in the basic sector, on log scales. The slope of the (population-weighted) regression line, shown in solid black, is steeper than 1 (shown with the dashed line). This means that the non-basic sector scales superlinearly with respect to the basic sector. A consequence is that in regions with larger economies, the fraction of all income from the non-basic sector is substantially larger: as Figure 3B shows, the fraction of income from non-basic industries rises from around 30% in regions with total income under \$100 million to more than 60% in some metropolitan areas with total income over \$100 billion (Nashville, TN, and Charlotte, NC, have the largest share among large metros, at 65% and 62% respectively).

# [Figure 3 here]

These scaling patterns appear to be driven by a few large industry sectors: professional, scientific, and technical services (NAICS sector 54); Wholesale Trade (NAICS 42); and Management of Companies and Enterprises (NAICS 55). These large sectors are known to scale superlinearly with city size (Youn et al. 2016). In the tripartite classification scheme used in my primary analysis, most industries within them are classified as "regional", and therefore non-basic, although in the binary classification scheme used by the US Cluster Mapping Project many of their component industries are classified as "traded" and therefore basic. This makes the patterns in Figure 3 somewhat sensitive to the classification scheme used. Appendix Figure A2 replicates the analysis in Figure 3 using the Cluster Mapping Project classification. As it shows, under the alternative classification scheme the non-basic sector still scales superlinearly, but levels off around 45% for regional economies with more than \$10 billion in total income.

The greater size of the non-basic sector in larger regional economies occurs even though financial income (part of the basic sector) is greater, on average, in larger cities. It may reflect how the scale of large cities allows makes it more possible for companies to turn a profit in industries that meet only the needs of local residents, or the greater industrial

diversity and complexity that exists in larger metros (Fritz and Manduca 2021; Jacobs 1969).

#### Income per capita

An additional question is whether different economic base compositions are associated with different income levels. Recent research has shown that transfer programs often have the effect of reducing interregional inequality in per capita income, suggesting that transfer-dependent regions may be poorer on average (Manduca, Castro, and Ochoa 2024; Silveira-Neto and Azzoni 2011, 2012). Figure 4 plots total income per capita (combining the basic and non-basic sectors) against the fraction of the economic base from transfers. As it shows, there is a strong negative correlation (r = -0.76): places that are more dependent on transfer income are indeed poorer overall. Appendix Figure A3 plots the relationship between income per capita and the proportion of the economic base from private earnings, government earnings, and finance. There is a positive correlation (r = -0.11) with the proportion of the economic base from (r = -0.11) with the proportion of the economic base from government earnings.

[Figure 4 here]

These findings indicate that transfer-dependent regions are poorer overall, while regions with larger private sectors and more financial income are richer. However, this analysis cannot determine the causal direction of these relationships (for instance, do regions become transfer-dependent because they are already poor?). It also leaves open the question of whether financial income augments or substitutes for other basic sector income—do regions that gain substantial financial income keep their other industries, or do they become finance-dependent? For these reasons, the descriptive bivariate relationships shown in Figures 4 and A3 should be interpreted cautiously, and future research should seek to explore the causal relationships in greater detail.

#### Discussion

Economic base analysis is foundational to scholarship on economic geography and regional science, and to the practice of local economic development. Traditionally, this analysis has focused primarily on employment, distinguishing between jobs in "basic",

"export", or "traded" industries and those in the "non-basic" or "local" industries (Moretti 2010; Porter 2003; Thulin 2015). However, as researchers have periodically noted (e.g. Hirschl and Summers 1982; Milano and Talandier 2025; Nesse 2014), earnings from traded sector employment are not the only way in which income can enter a region.

Here, I have analyzed the role of financial and transfer income in regional economies across the United States. Both sources of income are of first-order importance: transfers collectively made up 40% of the economic base of US regions in 2022 and financial income 26%, while private earnings in traded industries—the traditional subject of economic base analysis—made up just 24%. The composition of regional economic bases also varies wildly across the country. In Cape Coral, Florida, only 7% of the economic base comes from earnings in traded industries. The rest is from transfers and retirement savings. Conversely, earnings from private industries made up 72% of the economic base of Midland, Texas, and 60% of that of San Jose, California.

The massive contribution of transfer and financial income to the economic base of most US regions has important implications for policy. In most parts of the US, the largest single driver of economic activity is transfers from the federal government—primarily from Social Security, Medicare, and Medicaid. Dividends and interest accrued from savings and investments are as important as the money earned from the traded sector. Income from these sources circulates throughout the local economy—buying houses, purchasing food at restaurants, paying for legal services or car repairs—in just the same way that earnings from traded industries do.

This is not to say that export industries aren't important. Earnings from these industries make up roughly a quarter of the economic base nationwide. Moreover, on some level, both financial income (largely dividends from corporate profits) and transfer income (financed by federal taxes) depend on economic activity generated by traded sector industries across the country as a whole. But for understanding the economic conditions facing a single region—or strategizing to change them—transfers and finance may be more central.

The findings in this paper open numerous avenues for future research. One is to directly estimate the local income multipliers for transfer and financial income, ideally using exogenous shocks to infer causality. How many dollars of additional local income are generated by a \$1 increase in transfers to a region? How many by a \$1 increase in financial income?

Future work should also further explore whether different economic base compositions have impacts on the number and quality of jobs in the non-basic sector, and whether there

is an optimal mix of finance, transfers, and earnings. Other social outcomes could be examined as well, such as health outcomes or social mobility.

Another important question is what has driven the pronounced change in composition over the past 20 years, with transfers replacing private sector earnings as the largest single source of economic base income. To what extent was this driven by retirements, to what extent by income maintenance transfers to workers who had lost their jobs, and to what extent was it a product of other factors? The United States is also known to have a less generous welfare state than many other high-income countries, and has undergone a period of financialization in its economy, raising the question of whether the role of transfers may be smaller but that of financial income larger than in other countries. Recent findings from Brazil and France suggest that unearned income plays an important role in these countries as well (Milano and Talandier 2025; Talandier 2023).

With the growth of spatial inequality and regional divergence over the last 40 years, understanding the drivers of regional economic performance is more important than ever. An important first step is to broaden our understanding of the economic base to encompass all sources of income that sustain regional economies.

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# Tables and Figures for "Financial and Transfer Income as Components of the Regional Economic Base"



Figure 1A. Composition of US economic base by income source and year, 2001-2022.

**Figure 1B.** Basic sector and non-basic sector income as fraction of national total, 2001-2022.



**Figure 2.** Fraction of regional economic base from earnings (panel A), finance (panel B), and transfers (panel C), 2022.







A. Scaling of non-basic sector income with basic sector income

B. Proportion of income from non-basic sector against total income from all sources









## Tables

Table 1. Most overrepresented	d sources of basic sector in	come by type of region, 20	022
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Decienture	Description	Basic sector	% of basic	10
Region type		income	sector	LŲ
	Nonstore retailers	675,370	0.2%	19.11
	Computer and electronic product manufacturing	39,213,300	12.6%	7.87
	Support activities for mining	6,349,835	2.0%	6.50
	Other information services	11,016,634	3.5%	6.24
A. Majority	A. Majority Farm earnings		8.8%	6.04
earnings	Publishing industries (except Internet)	9,642,147	3.1%	4.36
	Oil and gas extraction	12,405,189	4.0%	4.29
	Mining (except oil and gas)	1,957,424	0.6%	3.99
	Petroleum and coal products manufacturing	2,269,834	0.7%	2.72
	Motor vehicles bodies and trailers and parts manufacturing	5,258,005	1.7%	2.17
B. Majority finance	Rental and leasing services	343,579	0.4%	8.56
	Amusement gambling and recreation industries	792,740	0.9%	5.52
	Scenic and sightseeing transportation	60,204	0.1%	3.70
	Accommodation	2,173,972	2.4%	2.56
	Dividends	43,692,430	47.4%	2.55
	Monetary interest	17,580,515	19.1%	2.54
	Museums historical sites and similar institutions	22,289	0.0%	2.19
	Funds trusts and other financial vehicles	48,285	0.1%	1.70
	Support activities for agriculture and forestry	195,212	0.2%	1.21
	Management of companies and enterprises	165,574	0.2%	1.17
C. Majority transfers	Forestry and logging	3,235,644	0.2%	3.59
	Wood product manufacturing	10,976,913	0.7%	2.65
	Support activities for agriculture and forestry	6,632,743	0.4%	2.51
	Paper manufacturing	6,670,218	0.4%	2.31
	Mining (except oil and gas)	5,068,876	0.3%	2.14
	Textile mills	2,172,026	0.1%	2.13
	Leather and allied product manufacturing	483,439	0.0%	1.97
	Rail transportation	3,717,773	0.2%	1.68
	Beverage and tobacco product manufacturing	2,461,220	0.2%	1.66
	Supplemental Security Income (SSI) benefits	14,639,559	1.0%	1.63

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## Appendix

**Appendix Figure A1**. Composition of US economic base by income source and year, 2001-2022, using the US Cluster Mapping Project classification of industry market areas (Delgado et al. 2014).



Appendix Figure A2. Scaling of non-basic sector, Delgado et al. (2014) classification.



A. Scaling of non-basic sector income with basic sector income

B. Proportion of income from non-basic sector against total income from all sources



**Appendix Figure A3.** Income per capita and proportion of economic base from various sources

#### A. Private earnings



#### B. Government earnings



Per capita income vs. fraction of economic base from government earnings Population–weighted correlation: –0.114

# C. Finance



Per capita income vs. fraction of economic base from finance Population-weighted correlation: 0.585