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SHOCK AND ROLL: CALIFORNIA'S CREATIVE ECONOMY FROM 2015 - 2021

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INTRODUCTION

California's Creative Economy (CE) has been an economic growth center for longer than most realize. Well before the epicenters of Hollywood and Silicon Valley formed, the state's residents were churning out creative products at an industrial scale. California has cultivated wine production since 1769, with mid-19th Century wine entrepreneurs like Jean Louis Vignes producing hundreds of thousands of gallons of wine for a national audience[1]. Around the same period, the California Gold Rush launched the worldwide career of Levi Strauss and his iconic company, one that is still headquartered in the state. For their part, artists like George Innes and Albert Bierstadt made their own distinctive marks on American art at this time. The Golden State's long history of symbolic production testifies to its resiliency in the Creative Economy. Such resiliency is particularly relevant today in the context of the post-pandemic recovery.

The state's creative industries were already confronting a series of overlapping challenges prior to 2020. Creative Manufacturing was succumbing to competition from lower cost areas[2], and "runaway" film production was threatening the state's status as a "full stack" film center[3]. Internet Publishing was highly dynamic but took until 2015 to fully recover from the early-2000s tech bubble.

[1] Carosso, 2021; Geraci, 2004
[2] Drayse, 2004; Scott, 1996
[3] Steinhart, 2019; Breen et al., 2005
[4] Ramani and Bloom, 2021; Barrero et al., 2021

These long-term challenges were compounded in 2020 by COVID-19 and the series of compounding and interrelated problems that the crisis presented. Today, the state's economy finds itself in its third year of recovery from the initial COVID wave, and many might be wondering about its prospects. The existing challenges did not subside, and now rising inflation and shrinking supply chains are placing even more pressure on Creative Manufacturing. Creative Services, especially Digital Publishing and entertainment, is faced with evermore competitive global markets and hybrid labor markets that might be less tethered to the state. In an era where more and more offices are operating in hybrid or completely remote formats[4], it is worth wondering whether creative employment will continue to cluster together across the state.

Amid such angst, it is important to have clear diagnostics on creative industry employment in California, not just in the pandemic period but in its run-up as well. Here, we provide just that. This short and focused report offers analysis on employment, wages and establishment formation across the Creative Economy. It relies on analysis of the most current industry data from the Quarterly Census of Employment and Wages (QCEW) published by the U.S. Census Bureau, covering the period from January 2015 to September 2021. This somewhat longer analytical timeframe allows for any pandemic spikes to be distinguished from normal economic cycles and trends that were already in motion prior to 2020.

The analysis begins with a small section on how to measure creativity in the economy. Then, in the main portion it progresses from global to local snapshots of the Creative Economy, with the initial discussion centering on the entire sector and the following sections considering changes by subsector and county.

Three main results are worth highlighting at the outset:

- First, the Creative Economy appears to have weathered the pandemic. It added 70,064 jobs since 2015 and appears to be bouncing back to its 2019 peak. Wages per-employee have increased dramatically by nearly 40% since 2015, which is even impressive on an employment-adjusted basis. Establishment growth has accelerated since 2017 and through the pandemic.

- Second, these gains have not been consistent across sectors. Digital Publishing industries have added 125,885 jobs since 2015 and (counter to macro trends) 12,216 jobs during the pandemic period.

- Third, the growth of digital media and the Creative Economy overall has been geographically centered in the San Francisco Bay Area.

WHAT IS THE CREATIVE ECONOMY?

For all the discussion on the Creative Economy (CE) among policymakers and practitioners, there is no straightforward method or approach for measuring its size and growth with industrial and occupational strategies.

We accept the CE as a category of industries that produce products with high degrees of symbolic differentiation[5], meaning products with a high degree of cultural, subjectively expressive content. The production of different creative products will depend on various resources and organizational systems, drawing in many kinds of workers. However, creative sectors are assumed to share similar features, especially in how they are assessed by consumer markets[6]. Standard industry categories, such as the North American Industrial Classification System (NAICS), attempt to classify systems under the same groupings. The QCEW reports employment, wages, and establishment levels by industry category each quarter.

Here, the CE is said to be composed of six main subsectors:

- Architecture and Related Services.
- Fashion.
- Creative Goods and Products (CGP), exclusive of Fashion.
- Entertainment.
- Fine Arts, including Performance and Artistic Institutions.
- Media, including Digital Publishing.

Each of these sectors is highly intensive in creative inputs, such as creators and designers but also draws in workers from other areas of the labor force.

Elsewhere, researchers have adopted an occupational approach to creative work which holds that creative workers are those who do creation[7]. This method is well-suited for discussions on how job content is changing and/or how the particular needs of different workers might differ. It is possibly less useful in industrial or workforce development discussions which are centered on the entire production system. An additional benefit of the industrial approach is that it can exploit the QCEW's extensive and current data.

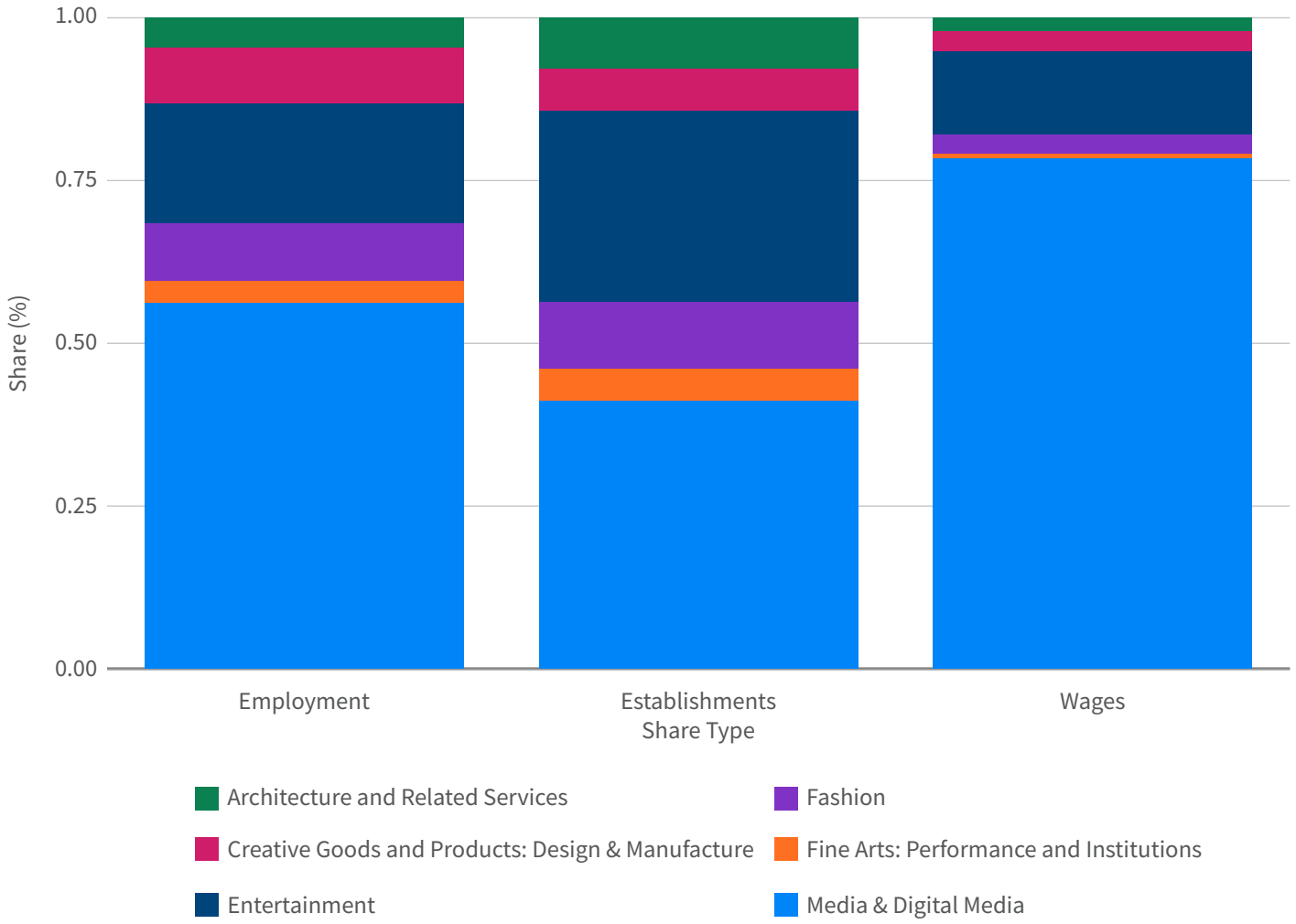
We would emphasize that any CE study is going to require difficult decisions about what is inside or outside of the CE. Some major industry categories that are not so creative have very creative elements and vice versa. In addition, some industries become less creative over time. We would argue that the wine industry of the 19th Century and the car industry of the early 20th Century were much more creative or innovative sectors than their more standardized descendants, but other researchers are likely to disagree.

[5] Adler, 2021; Heffetz, 2011; Witt, 2010
[6] Cunningham and Potts, 2015; Karpik, 2010; Caves, 2000
[7] Markusen, 2008; Florida, 2002

THE COMPOSITION OF CALIFORNIA'S CREATIVE ECONOMY IN 2021

California's Creative Economy (CE) is unequally distributed across designated subsectors, and what the biggest subsector is differs in terms of employment establishments and wages (Figure 1). In the most recent QCEW estimates, Media and Digital Media made up 56.2% of CE employment but accounted for 78.3% of wages and 41.1% of establishments. Entertainment employed 18.5% of the CE, paid 12.8% of wages, and held 29.4% of the establishments.

FIGURE I: EMPLOYMENT, WAGES, AND ESTABLISHMENTS ACROSS MAJOR SECTORS (2021)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

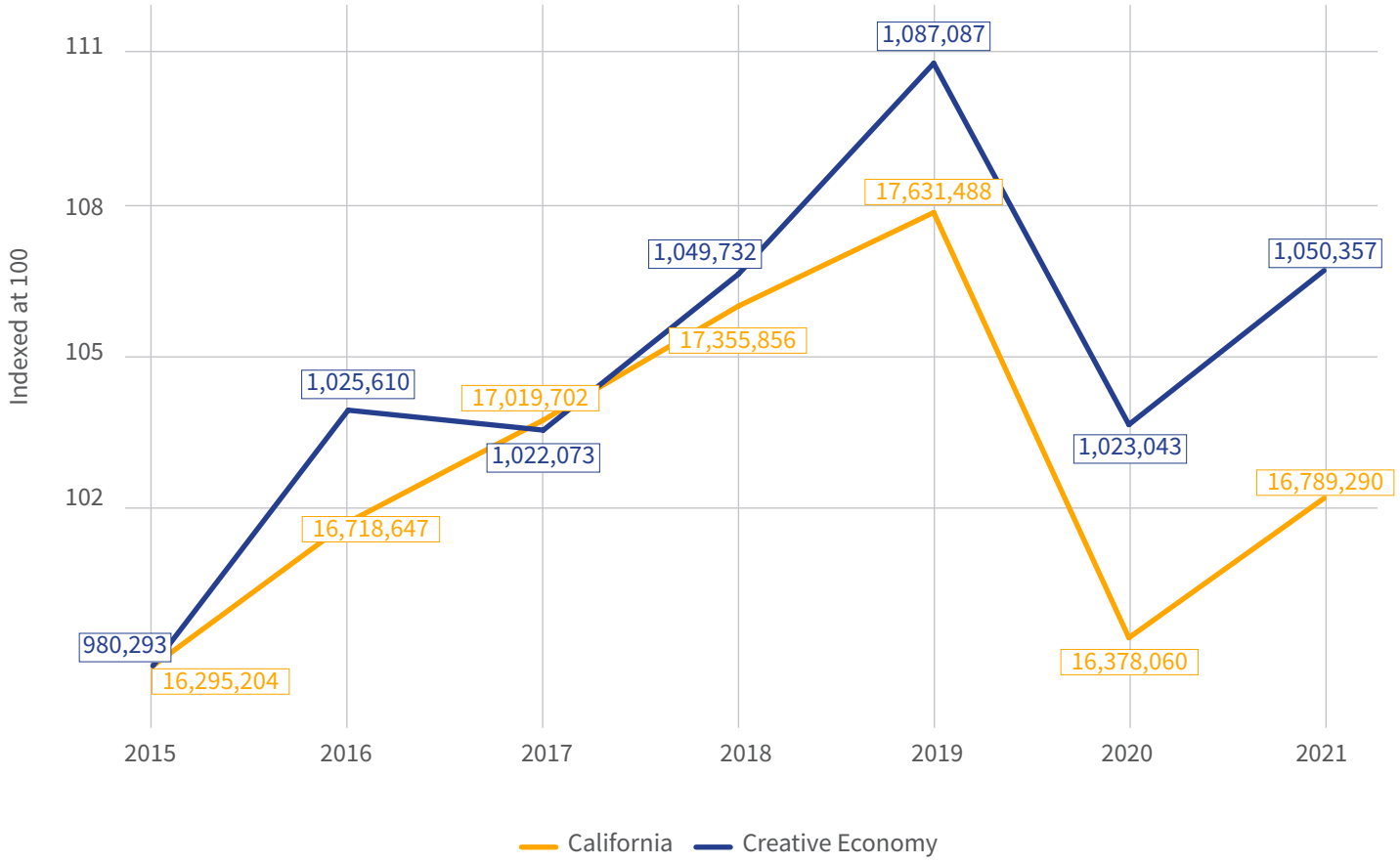
Creative Goods and Services (absent Fashion) and Fashion employed 8.54% and 8.8% of CE employees each. Architecture and Related Services, including Graphic Design, employed 4.6% of the larger sector, and Fine Arts employed the smallest amount at 3.4%.

NET GROWTH OF THE CREATIVE ECONOMY SINCE 2015

The Creative Economy (CE) has grown considerably in every way since 2015, including employment, wages, and number of establishments.

In 2015, the total number of workers in creative industries sat just below 1 million, or roughly 6% of the California economy. It's a number that peaked in 2019 at 1,087,087, dropped in 2020, and rebounded somewhat by 2021 to 1,050,357 workers. The state's creative workforce has grown by roughly 8% during the entire period, significantly faster than the economy at large.

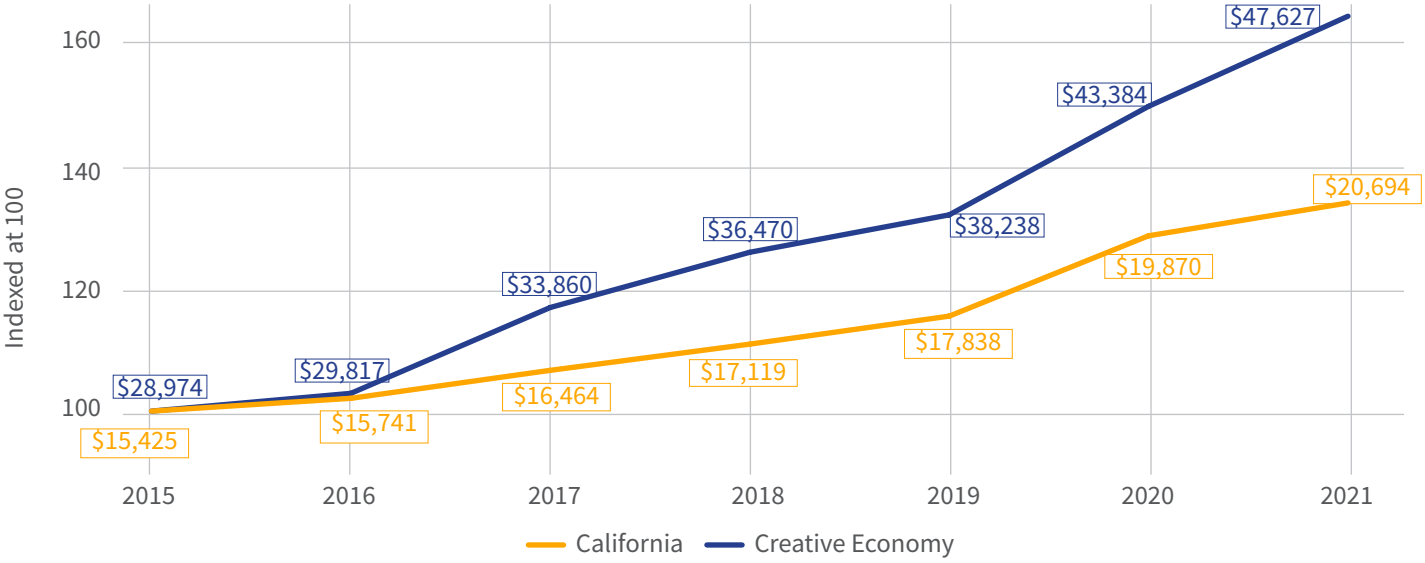
FIGURE 2: INDEXED EMPLOYMENT CHANGE IN CALIFORNIA'S OVERALL AND CREATIVE ECONOMIES (2015 - 2021)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Growth in wages[8] per-worker has grown even faster (Figure 3), increasing 40% since 2015. At the beginning of the period, CE wages per-capita were solidly above the economy's average (1.8x). By the end, the average worker's share of wages was 2.35 times the average worker in the economy.

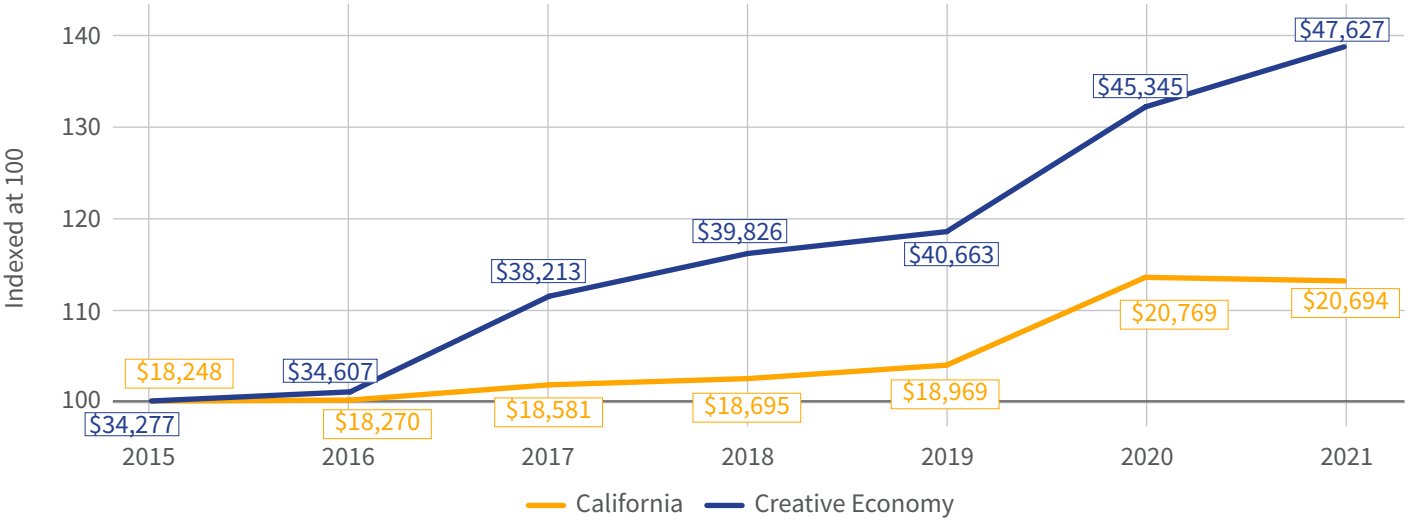
FIGURE 3: INDEXED WAGE PER-WORKER CHANGE IN CALIFORNIA'S OVERALL AND CREATIVE ECONOMIES (2015 - 2021)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Strikingly, CE wages per-capita have accelerated during the pandemic and done so faster than inflation. While wages nationwide were inflated by roughly 6% over the pandemic period, CE wages increased by roughly 17%. Wages per-capita in the California economy did nothing of the sort, increasingly slightly between 2019 and 2020 and plateauing between 2020 and 2021. Figure 4 shows wages overall, adjusted for cost-of-living changes.

FIGURE 4: INDEXED WAGE PER-WORKER CHANGE IN CALIFORNIA'S OVERALL AND CREATIVE ECONOMIES (2015 - 2021) ADJUSTED FOR COST-OF-LIVING CHANGES

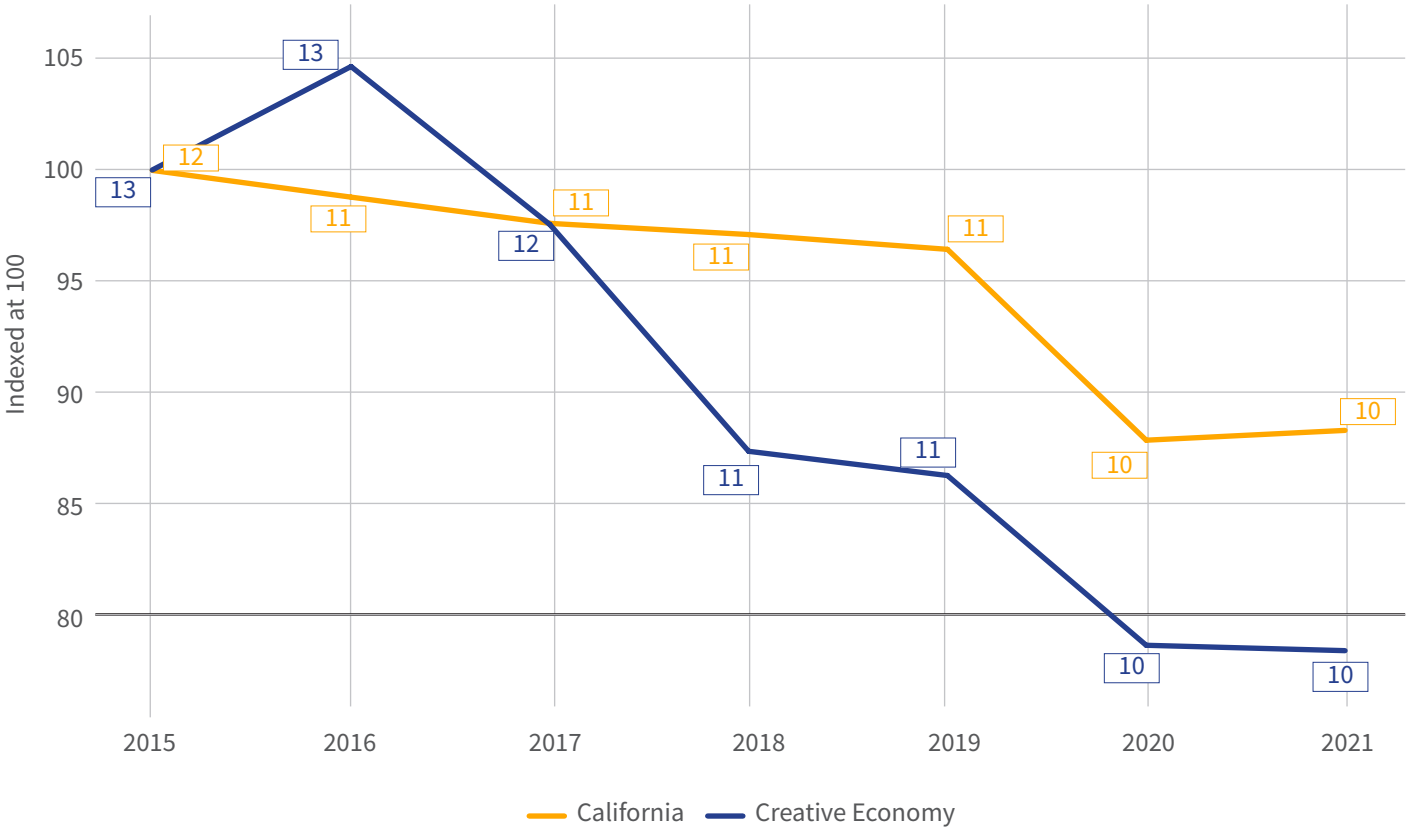


Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

[8] Keep in mind that these wage numbers reflect full and part-time workers, as well as non-wage cash payments, and should not be interpreted as annual salaries.

Figure 5 picks up on an interesting trend with respect to establishment size. There appears to have been signficant small business formation across the California economy, with the average size of a firm decreasing from roughly 12 employees to 10 over the period. This is driven somewhat by the CE economy, which saw an even steeper decline in workers per-organization. At the beginning of the period, the average CE firm was larger than average (13), and as of 2021 it was equivalent. In general, changes in employment per-firm can either be attributed to fewer workers or more firms. Califronia's CE economy added 28,183 firms during the period and 6,259 during the pandemic (2019-2021) period.

FIGURE 5: EMPLOYMENT PER-ESTABLISHMENT CHANGE IN CALIFORNIA'S OVERALL AND CREATIVE ECONOMIES (2015 - 2021)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

CREATIVE ECONOMY GROWTH HAS BEEN HIGHLY CONCENTRATED BY SECTOR

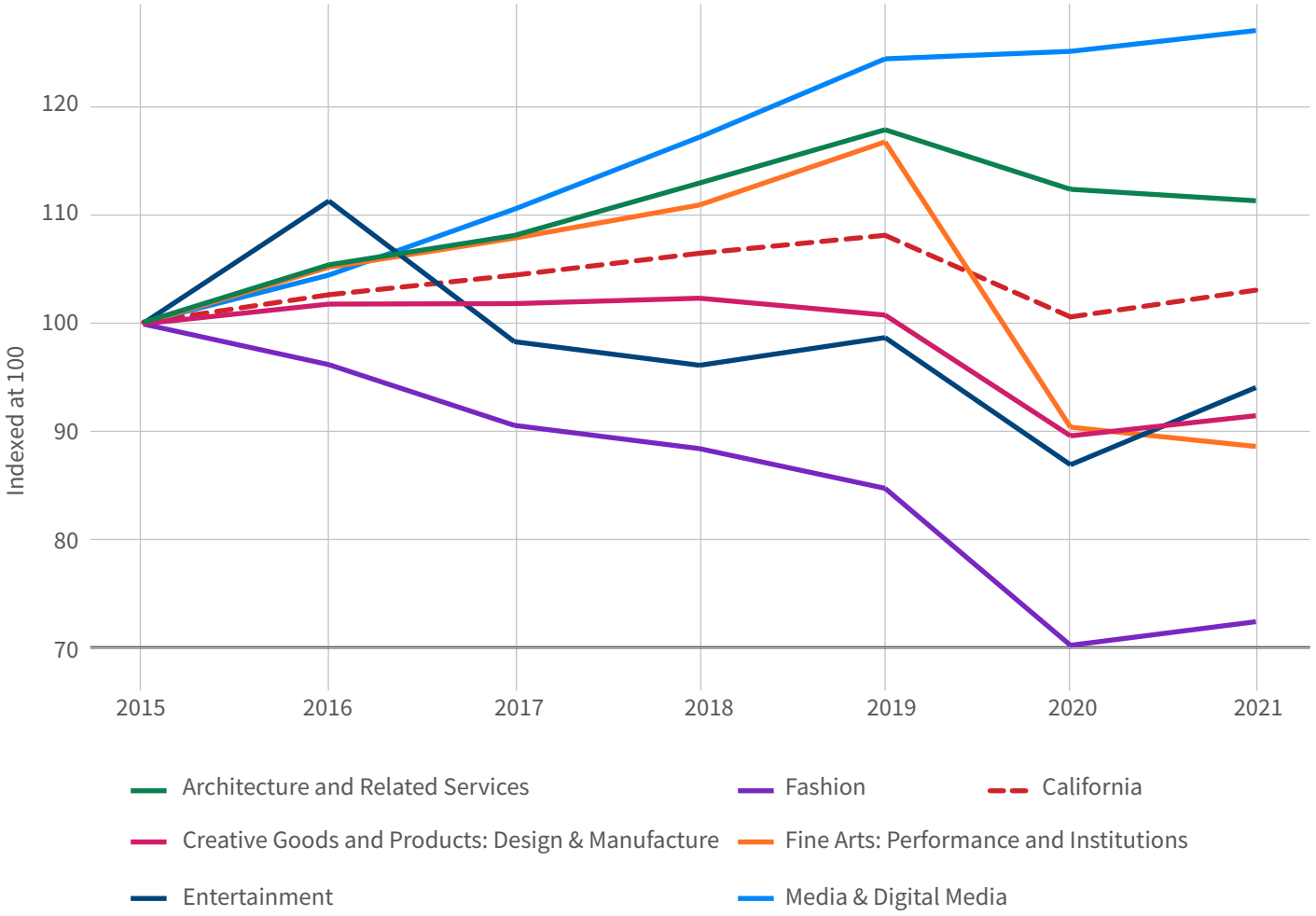
When Creative Economy (CE) growth is disaggregated by industry type, it becomes very clear that there has been anything but even growth across subsectors. It is much more accurate to say that Digital Publishing has keyed overall trends in the CE while other subsectors have experienced modest to negative growth.

TRENDS BY MAJOR SUBSECTOR

The basic sectoral pattern emerges at the six categories of product types (major subsector level). In Figure 6, we see that the major employment trend differs wildly among sectors. The pattern from Figure 2 (continuous growth through the period) is only evident in Media. Since 2015, a full 125,885 such jobs were added to the California economy from Media. For context, this is more jobs than San Luis Obispo had in its labor market in 2021 (117,300). Media job growth in the pandemic period[9] has been slower but positive, with 12,216 jobs added between 2019 and 2021.

[9] In this report, we refer to the 2019 - 2021 period as the pandemic period because the SARS-Covid-19 reached pandemic status in first-quarter 2020, so 2019 is considered the benchmark year for calculating percent change during pandemic period.

FIGURE 6: INDEXED EMPLOYMENT CHANGE BY MAJOR SUBSECTOR (2015 - 2021)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

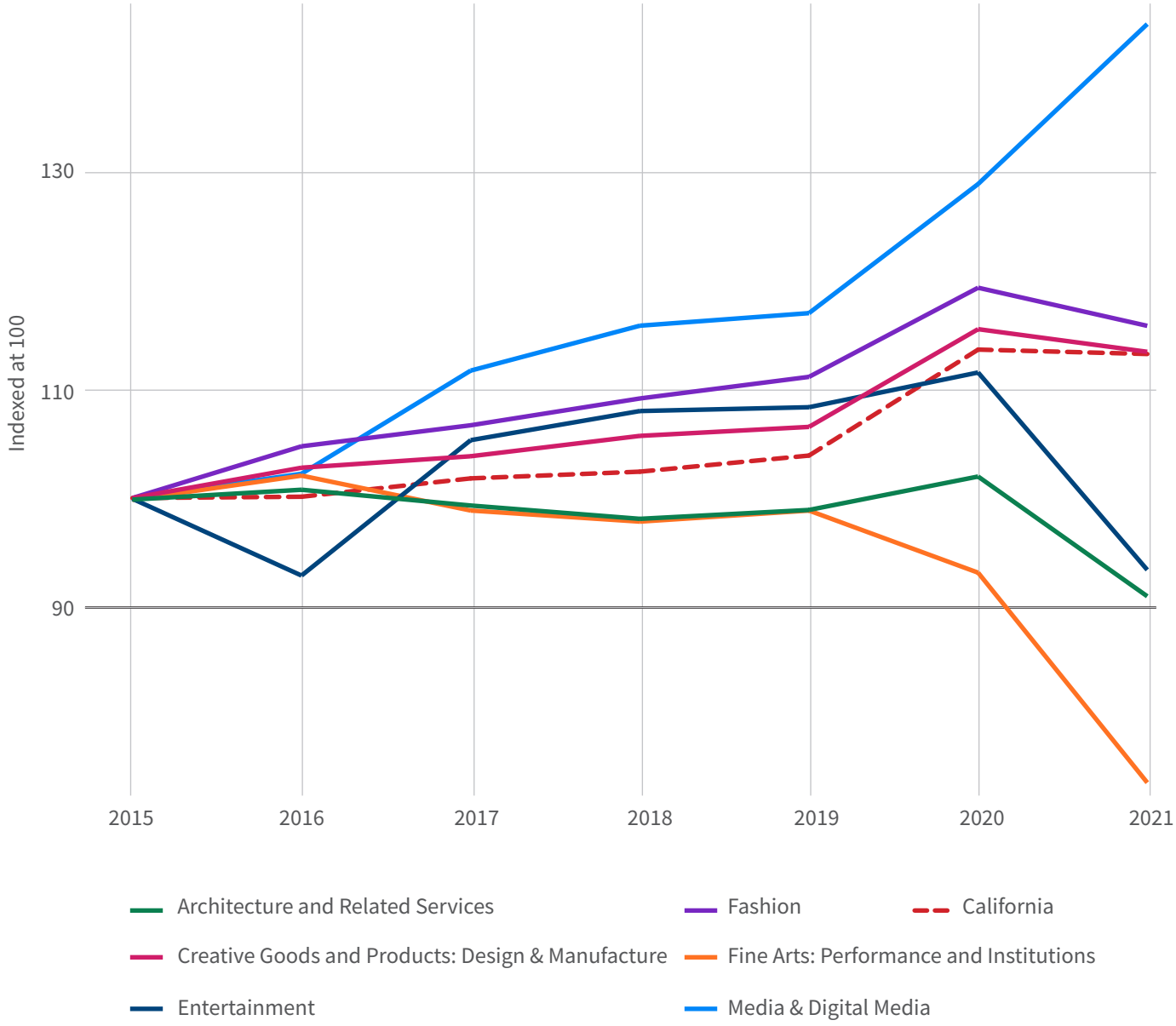
The only other major sector to add jobs was Architecture and Related Services, a category that includes Interior Design and Landscape Design. About 4,898 jobs were added between 2015 and 2021; however, employment had peaked in 2019 and 2,863 jobs were shed during the pandemic. The pattern displayed here basically matched California's economy.

The remaining sectors lost employment since 2015. The Fine Arts and Performance sectors were hit the hardest by the pandemic relative to each sector's size. About 11,427 of these jobs were lost since 2019 and 4,632 jobs overall. Fashion jobs lost the most in absolute terms, (35,287 overall and 15,814 during the pandemic). Entertainment and Creative Goods and Products lost 12,358 and 9,601 jobs, respectively. In each case there were steep 2020 declines followed by modest recoveries.

These trends point to significant changes in the composition of the CE. At the end of the period, a randomly selected creative worker was much more likely to be from Media and somewhat more likely to be from Architecture and Related Services than at the beginning. By the same token, Entertainment, Fashion, and Creative Goods and Products (CGP) workers factored less into the overall creative workforce.

Turning to main trends in wages per-capita (Figure 7), we see somewhat different patterns beyond what transpired in Media. Media wages grew even faster than employment in a trend that was welcome to the average worker in those sectors. In 2021, Media wages per-capita were $66,404, their highest level during the period.

FIGURE 7: INDEXED WAGE PER-EMPLOYEE CHANGE BY MAJOR SUBSECTOR (2015 - 2021)



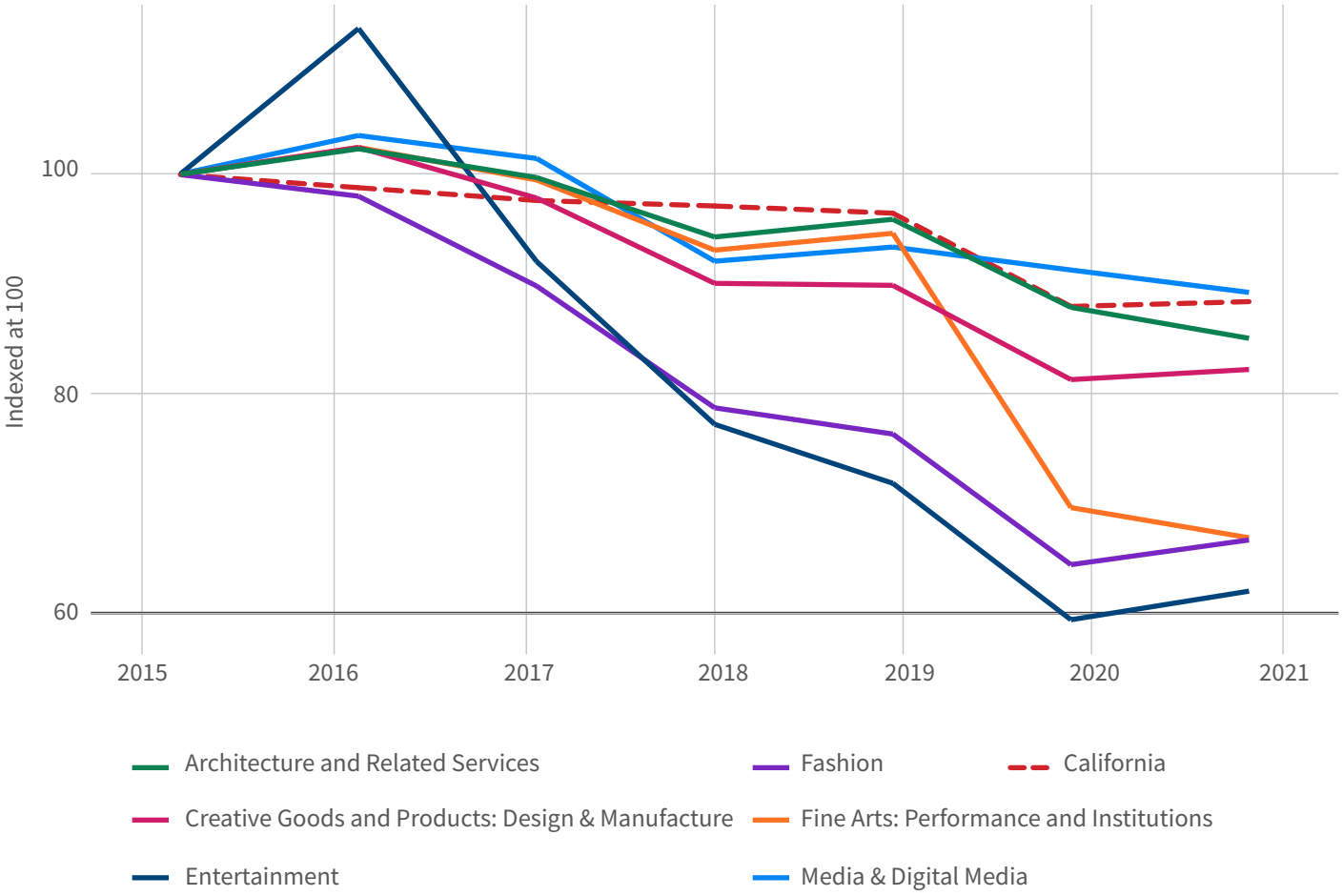
Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Fashion and CGP industries may have shed workers between 2015 and 2021, but the average worker saw higher wages at the end of the period in both sectors. It might be said, then, that wages per-capita grew in the creative goods category during the period. In each case, wages per-capita increased between 2019 and 2020 and decreased between 2020 and 2021 as the economic recovery picked up steam. The non-media services industries (Entertainment, Fine Arts and Architecture) saw lower average wages over the period. This was especially true of Fine Arts.

Ultimately, no sector was more propulsive than Media. It was able to add jobs to the California economy, even as those jobs became better compensated. On the other hand, no sector fared worse than Fine Arts and Performance, where workers lost jobs and wages per-job. The other sectors added jobs, or wages per-job, but not both.

Trends were uniform across the CE in terms of employment per-establishment. Here, the experience of the CE is consistent among subsectors and California's economy as a whole. This result is consistent with a national trend among metropolitan counties, as documented by Olugbenga[10] of the Center for American Progress. He finds that firm formation accelerated across the nation's metropolitan counties during the 2010s. California is largely a metropolitan state, and creative employment is particularly concentrated in metropolitan counties[11].

FIGURE 8: INDEXED EMPLOYEES PER-ESTABLISHMENT BY MAJOR SUBSECTOR (2015 - 2021)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

[10] Ajilore, 2020
[11] McGranahan and Wojan, 2007

PERIOD SPLITS BY PRODUCT GROUP

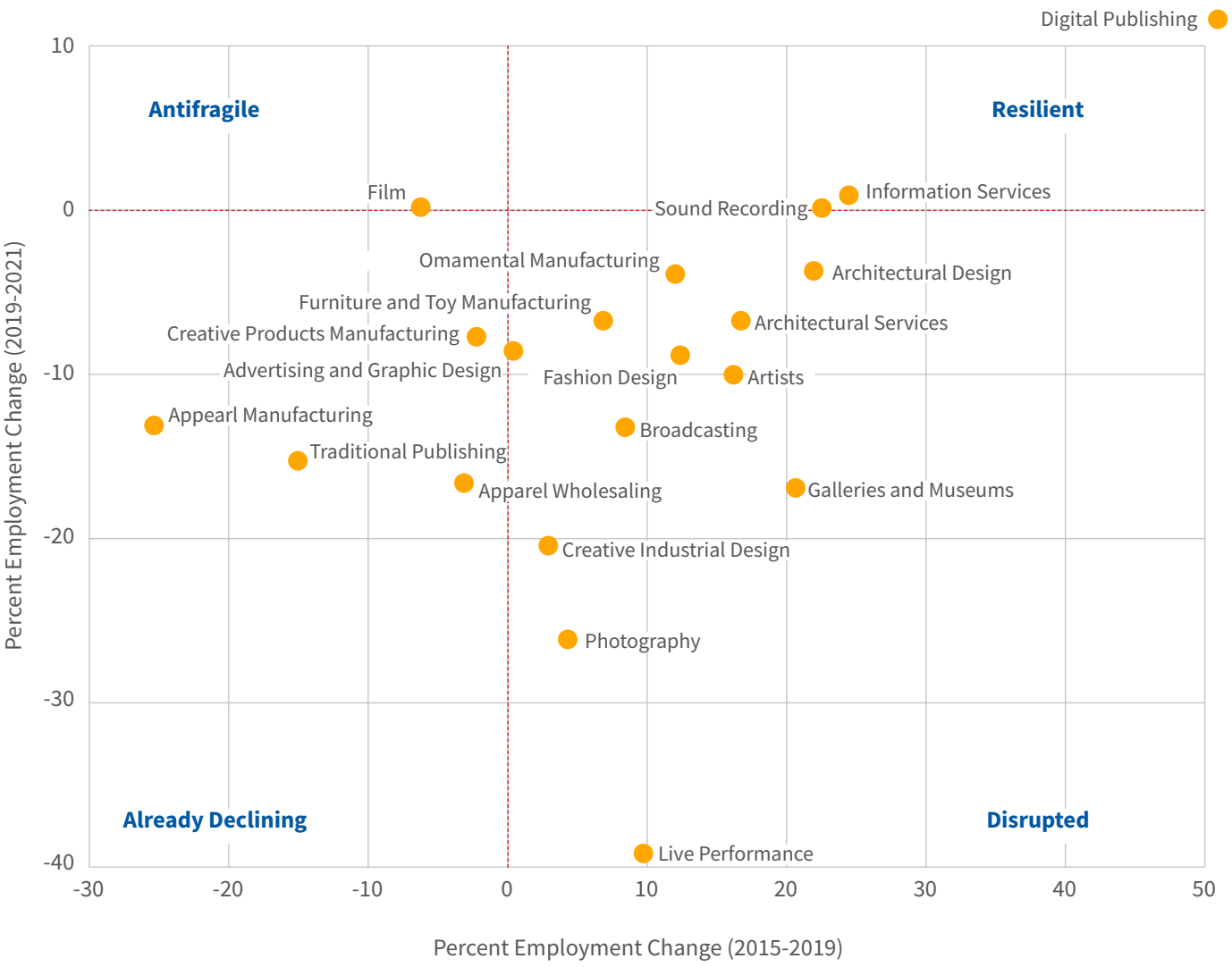
Next, we consider a more granular view of the CE at what we call the specific product level. This level more closely matches the market for creative products. Analysis here can help determine whether the previously discussed trends are artifacts of how different types of products were grouped together (for instance, Interior Design and Architecture).

Instead of looking at trends as a time series, we map them on a grid with four quadrants corresponding to four main types of change. Table 1 summarizes these. A Resilient product group grew before and after the pandemic, and a Disrupted product group was thrown off its growth track similar to the overall economy. An Already Declining subsector experienced declines in both periods, and an Antifragile one counterintuitively declined and then grew. The latter name was originally coined by the philosopher Nassim Taleb in his 2012 treatise on “things that gain from disorder”.

TABLE I: A TYPOLOGY OF CREATIVE INDUSTRY TRENDS

Quadrant	Trends
Resilient	Pre-Pandemic Growth, Post-Pandemic Growth
Disrupted	Pre-Pandemic Growth, Post Pandemic Decline
Already Declining	Pre-Pandemic Decline, Post Pandemic Decline
Antifragile	Pre-Pandemic Decline, Post Pandemic Growth

FIGURE 9: PERCENT EMPLOYMENT CHANGE BY PRODUCT GROUP (PRE-PANDEMIC VS POST-PANDEMIC)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Figure 9 plots employment change by product group in the four quadrants. Strikingly, once again we see there is only one solidly Resilient product group: Digital Publishing. Digital Publishing employment grew by more than 50% between 2010 and 2019, and another 10% in the pandemic period. Trends in this industry are almost entirely responsible for the aggregate trends suggested by Figures 2 and 7.

Information Services, the most closely related industry to Digital Publishing, was also in the Resilient quadrant, albeit with only modest growth in the pandemic period. Traditional media services such as Broadcasting and Publishing fared far worse, with the latter experiencing declines in both periods.

Entertainment products saw divergent outcomes. Sound Recording experienced growth pre-pandemic and nearly no growth afterwards. Film, including production and distribution, was the closest to an Anti-Fragile product group, with no declines since 2019 and negative growth before.

In-person Arts and Culture, including galleries, museums and live performances, faced pandemic disruptions as expected. Among the consistently declining sectors were creative products manufacturing (Apparel and Non-Ornamental Manufacturing) and Advertising and Graphic Design. Ornamental Manufacturing, which refers to lighting and architectural figures, had experienced employment growth before 2019.

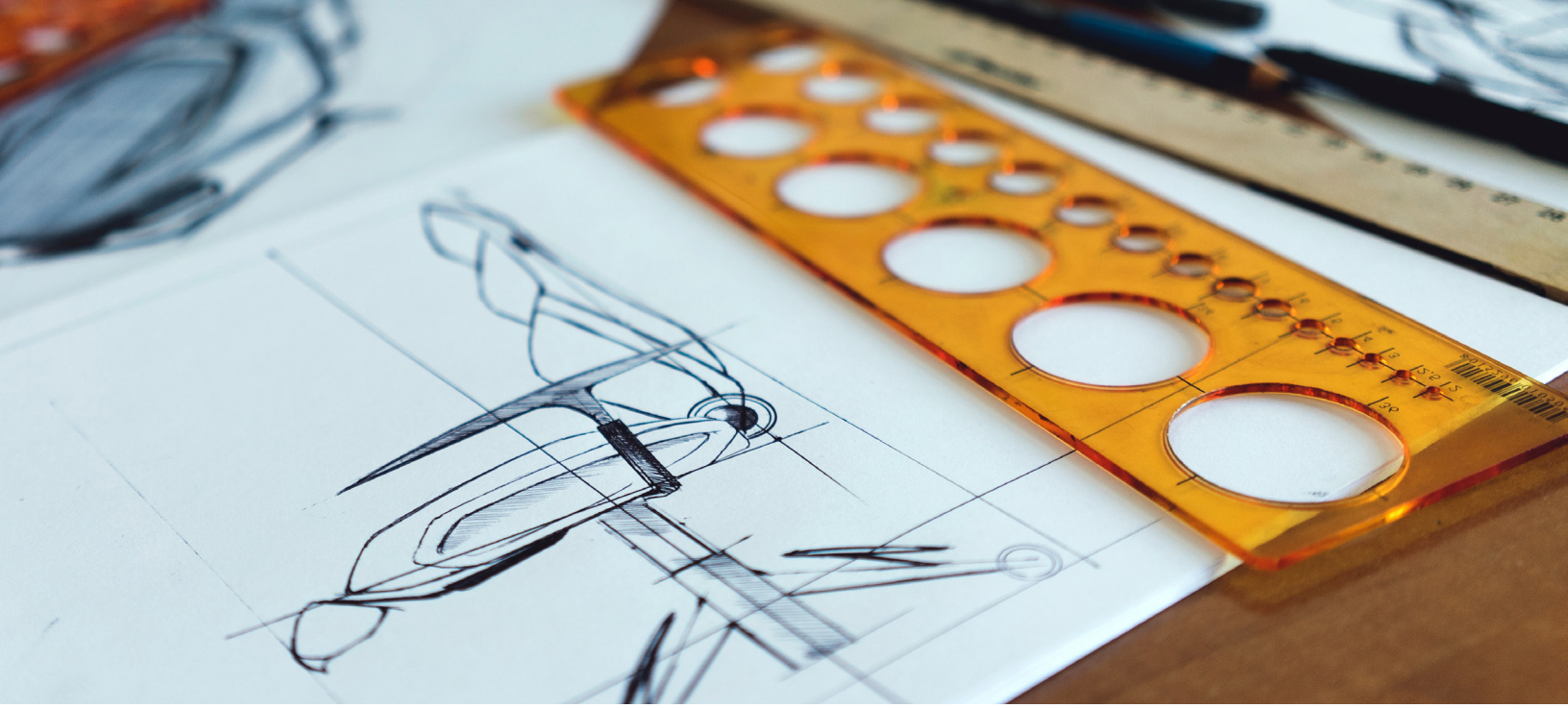
FIGURE 10: PERCENT WAGE PER-EMPLOYMENT CHANGE BY PRODUCT GROUP (PRE-PANDEMIC VS POST-PANDEMIC)

Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Figure 10 shows trends in wages per-capita. In this case, we see product-level trends consistent with those at the major subsector level (as captured by Figure 7).

Average Digital Publishing wages appear to have grown during the pandemic and not prior, and the same can be said of Advertising and Graphic Design and Galleries and Museums. No sector added more wages per-worker in the pandemic period than Industrial Design, with Information Services also being solidly Resilient. We see that Artists have experienced the most extreme wage loss during the entire period, especially from 2019 to 2021. Architectural Design was the only other product level to experience average wage declines in both periods.

As before, the picture emerging from Figure 10 is one of balance. There is no product with very high employment and wage per-capita growth. Product-level employment growth and wage per-employment growth appear to be negatively correlated. This is consistent with basic economic theory which holds that employees will be more inclined to enter sectors as wages grow, thus bidding down their wages, and vice-versa.



CREATIVE EMPLOYMENT GROWTH HAS BEEN SPATIALLY CONCENTRATED

To conclude, we consider trends at the county level. A major theme in studies on the Creative Economy (CE) is that it tends to be clustered in particular labor markets. The symbolic stature of Hollywood and Silicon Valley suggests such clustering, and so does our data. About 826,041 of the state's creative workers are located in just nine Southern California and Northern California counties, as Table 2 shows. A full 68% of CE employment and 77% of wages are based here.

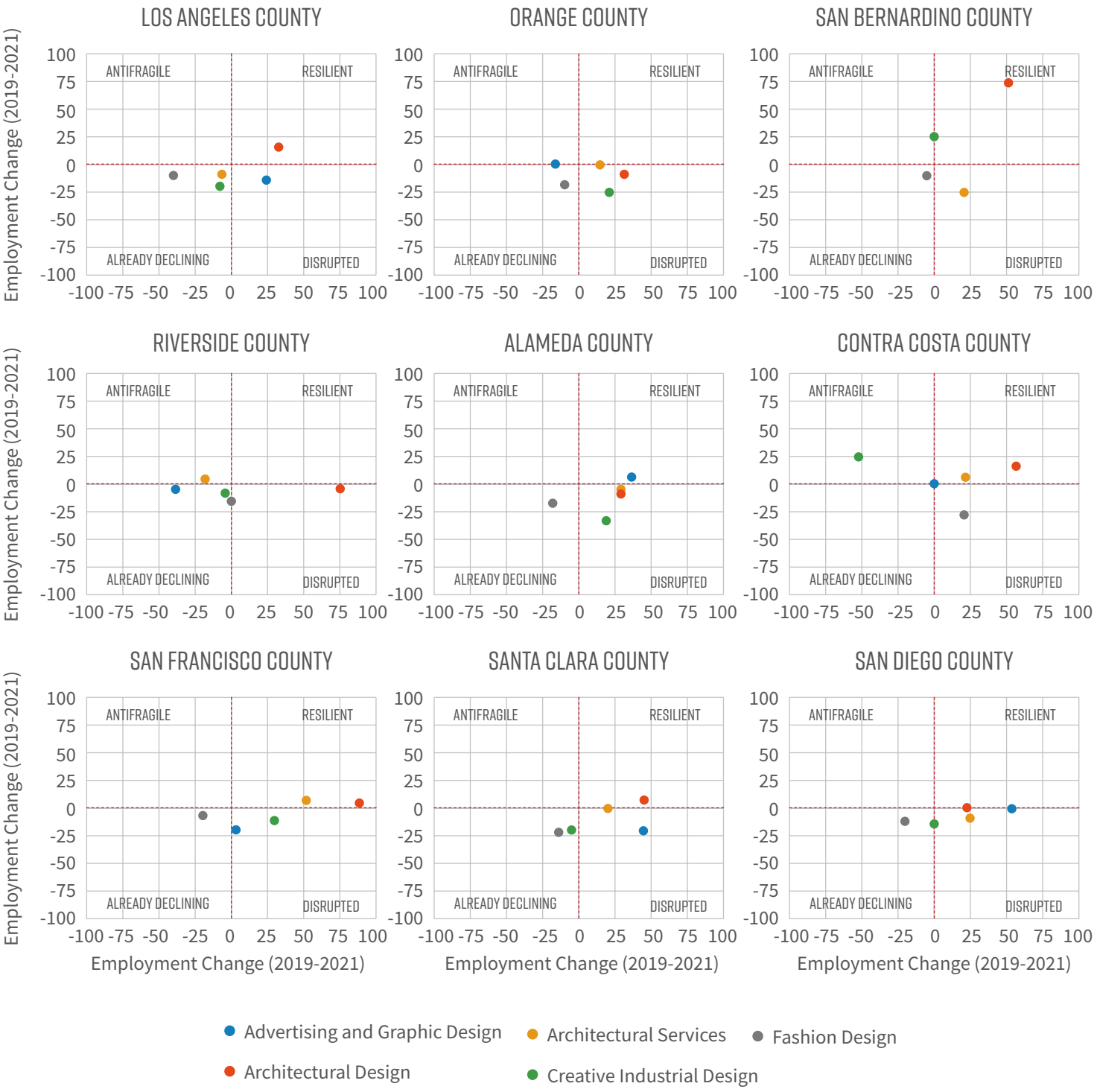
TABLE 2: CREATIVE ECONOMY CONCENTRATION IN NORTHERN CA AND SOUTHERN CA (2021)

County	Employment	Share of CE Employment	Wages	Share of CE Wages
Los Angeles County	365,761	34.8%	$11,473,208,179	22.9%
Santa Clara County	154,936	14.8%	$13,895,286,688	27.8%
San Francisco County	110,873	10.6%	$7,784,522,552	15.6%
Orange County	71,041	6.8%	$1,848,241,546	3.7%
San Diego County	50,159	4.8%	$1,284,893,075	2.6%
Alameda County	36,799	3.5%	$1,599,903,364	3.2%
San Bernardino County	14,861	1.4%	$214,393,920	0.4%
Riverside County	13,075	1.2%	$192,949,464	0.4%
Contra Costa County	8,535	0.8%	$300,276,909	0.6%
All Nine Counties	**826,041**	**68.1%**	**$38,593,675,821**	**77.1%**

Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

To get a sense of whether the trends identified previously are also clustered, we plot county-level trends by product group (on two-by-two grids) for key counties in Northern California and Southern California. Figure 11 shows trends in the highly significant publishing industries.

FIGURE II: PERCENT EMPLOYMENT CHANGE IN MEDIA IN KEY COUNTIES (PRE-PANDEMIC VS POST-PANDEMIC)



Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

We see that Digital Publishing grew in both intervals in areas already having significant levels of employment. Los Angeles County added 16,349 jobs in New Media (Digital Publishing and Information Services), and San Francisco County and Santa Clara County added 35,455 jobs and 40,092 jobs, respectively. The 88,896 jobs added in New Media in just these areas well eclipses the net number of creative jobs added in the entire state (70,064). There was also Resilient New Media growth in San Diego (3,761), Contra Costa (1,376), and San Bernardino (413) counties. Alameda, Orange and San Diego counties each added about 3,700 New Media jobs through the period but experienced pandemic-era losses (-3,799 for Alameda, -795 for Orange, and -1,141 for San Diego).

TABLE 3: TOTAL CREATIVE EMPLOYMENT CHANGE IN KEY COUNTIES (2015 - 2021)

County	Change (2015-2019)	Change (2019-2021)	Total	Category
Santa Clara County	35,899	3,739	39,638	Resilient
San Francisco County	29,917	-829	29,088	Disrupted
Alameda County	6,193	-4,509	1,684	Disrupted
Orange County	6,138	-5,376	762	Disrupted
San Diego County	5,417	-3,800	1,617	Disrupted
Riverside County	2,571	-1,424	1,147	Disrupted
Contra Costa County	1,189	-129	1,060	Disrupted
San Bernardino County	-256	-335	-591	Disrupted
Los Angeles County	-19,707	-24,642	-44,349	Already Declining

Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Table 3 captures the overall trends in the select Northern California and Southern Californian counties, highlighting a dramatic split between these regions. Led by Resilient Santa Clara, the northern counties added 72,231 Creative Industry jobs while the southern counties below Ventura lost 41,414 jobs, entirely because of trends in Los Angeles County.

TABLE 4: TOTAL CREATIVE EMPLOYMENT CHANGE IN LOS ANGELES COUNTY (2015 - 2021)

Product Group	Change (2015-2019)	Change (2019-2021)	Overall	Category
Digital Publishing	5,559	3,224	8,783	Resilient
Galleries and Museums	2,080	-879	1,201	Disrupted
Broadcasting	4,355	-3,236	1,118	Disrupted
Sound Recording	1,009	-27	982	Disrupted
Architectural Services	1,527	-651	876	Disrupted
Artists	3,962	-3,180	782	Disrupted
Architectural Design	856	-156	700	Disrupted
Furniture and Toy Wholesaling	899	-507	392	Disrupted
Advertising and Graphic Design	996	-814	183	Disrupted
Fashion Design	150	-130	21	Disrupted
Ornamental Manufacturing	-86	12	-74	Anti-Fragile
Photography	-147	-399	-547	Already Declining
Creative Industrial Design	174	-763	-589	Disrupted
Live Performance	1,066	-2,852	-1,786	Disrupted
Creative Products Manufacturing	-1,747	-1,876	-3,622	Already Declining
Information Services	-1,894	-2,487	-4,381	Already Declining
Apparel Wholesaling	-1,830	-4,072	-5,902	Already Declining
Film	-8,085	394	-7,691	Anti-Fragile
Traditional Publishing	-9,316	-1,296	-10,611	Already Declining
Apparel Manufacturing	-19,235	-4,948	-24,183	Already Declining
Total	**-19,707**	**-24,643**	**-44,348**	**Already Declining**

Source: U.S. Census Bureau's Quarterly Census of Employment and Wages; Analysis by UCR Center for Economic Forecasting and Development

Turning to Table 4, which drills down into Los Angeles dynamics by industry, we see that the trends mostly match the state as a whole, with most sectors seeing disrupted growth. However, major losses in Apparel Manufacturing (-24,183), Traditional Publishing (-10,611), Film (-7,691), Apparel Wholesaling (-5,902), Information Services (-4,381) and Creative Products Manufacturing (-3,622) led to a significant decrease in the county's participation in the CE.






CONCLUSION

In this report we have reported basic diagnostics related to how the Creative Economy (CE) grew and changed between 2015 and 2021. We have attempted to zero-in on key dynamics which can be summarized as follows:

- First, California's CE has grown by a healthy 7% (70,064 jobs) since 2015. While the state lost roughly 36,730 jobs between 2019 and 2021, it was able to hold on to most of its pre-pandemic gains (106,794). At the same time, creative jobs earned an average 17% more in 2021 than in 2021. On an overall basis, the state's CE continues to be a growth center, a reservoir of more better paying work.

- Second, this growth has not been uniform across the CE. Without blockbuster growth in Media and Digital Media, the CE would have shrunk by 55,821. What's more, product-level analysis makes clear that Digital Publishing and Information Services are entirely behind this trend, not traditional media, which has struggled. Wage growth has similarly been driven by Digital Publishing across the period.

- Third, there is a regional dimension to these trends. The clustering of the CE in Northern California and Southern California means big shifts in employment and wages are likely to be centered there. This was indeed the case over the past six years as just three counties added 88,896 New Media jobs. Los Angeles has also been the center of significant job losses in Manufacturing and Film Production, two areas that have long been concerning for local policymakers.

We have taken care to not over-interpret the results, especially when it comes to speculating about their causes. For instance, nothing in this analysis can determine if declining film production in Los Angeles County is due to "runaway" production, nor can the full effects of pandemic-era work arrangements be related to these trends. However, the trends cataloged here provide baseline-level data on the health of the CE among different sectors and in different areas of the state.

The UCR School of Business Center for Economic Forecasting and Development will continue to investigate the impact of these changes on community and workforce development as the CE continues to reconstitute following the pandemic.

ONLINE DATA & APPENDIX

The focus of this report has been on highlighting key trends in California's Creative economy. In the course of compiling it, the UCR Center for Economic Forecasting and Development has accumulated a number of graphs and figures that might be of interest to those with an eye for detail. An Online Appendix, with these figures, is available on our website. That site also has a link to download the full analysis.

Find the Online Data & Appendix here:

https://ucreconomicforecast.org/index.php/services-for-business/publications/white-paper-series/white-papers/californias-creative-economy/

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About the Center for Economic Forecasting and Development

The UC Riverside School of Business Center for Economic Forecasting and Development opened its doors in October 2015 and represents a major economic research initiative in one of California's most vital growth regions. The Center produces a wide variety of research both independently and in collaboration with academic, business, and government partners. Research products include monthly employment analyses, quarterly regional economic forecasts, a quarterly business activity index, a white paper series, and a major regional economic forecast conference, hosted annually.

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