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Creative class and Economic Growth

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I. THEORETICAL FRAMEWORK

Since the WWII the society and the government started to pursue culturally democratic path ultural activities and entertainment started to play an important to content the society and avoid further conflicts and aggression. The governments started to heavily subsidize the cultural sector of the path to "mass culture" was open. The phenomena of the mass culture and evolution of new frameworks and trends has been therefore reflected by the intellectuals and the academia throughout the second half of twentieth century.

The rise of the cultural industries was very much bound up with the rise of "mass culture". Reacting against what they saw as the misleadingly democratic connotations of the term "mass culture", Theodor Adorno and Max Horkheimer (1947) developed the idea of the "culture industry" as part of their critique of the false legacies of the Enlightenment. The term was intended to draw critical attention to the commodification of art. The culture was becoming a product therefore the term *culture industry*. This led to the need of broadening of public support the arts besides the so-called "high culture" that is usually comprehensible only to the people with higher cultural capital. The border between high culture and culture for masses started to blur.

The French sociologists such as Bernard Miège revisited the ideas of Adorno and Horkheimer and advocated a broader meaning of cultural industry because the term did not encompass a unifying structure. Therefore we talk about cultural industries (industries culturelles). According to Miège the cultural industries include broad spectrum of human activities ach has its own logic and organizational principles. We cannot compare TV broadcasting with press printing, for example.

According to Hesmondhalgh, there were several reasons why the growth and importance of cultural industries was accelerating during the second half of 20th century. A number of factors were involved: rising prosperity in the global North, increasing leisure time, rising levels of literacy, links between the new medium of television and new discourses of consumerism, the increasing importance of "cultural"

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¹ Hesmondhalgh, D,; Pratt A. "Cultural Industries and Cultural Policy". *International Journal of Cultural*

² Bordieu, P. Distinction: A Social Critique of the Judgement of Taste. [1979(1984)], p.3.

hardware" (i.e., hi-fi and television sets, and later video recorders and personal computers) for the consumer goods industry and so on. By the early 1980s, it was becoming increasingly difficult for cultural policy-makers to ignore the growing cultural industries. The first major attempt to address the rise of the cultural industries in policy circles took place at the international level, driven by UNESCO concerns about the unequal cultural resources of North and South. The UNESCO work recognized an economic dimension to culture and its impact on development, and began to analyze its industrial characteristics.³ The first evaluation of economic impact of the arts and a breakthrough publication was introduced in Britain by Myerscough in his research study The Economic Importance of the Arts in Britain published in 1988. Myerscough applied the multiplication effect that demonstrated the economic outputs of the cultural sector such as creation of new jobs and returns in taxes. The significance of this study was crucial to fume in cultural policies because it was a clear impetus for national and regional governments to acknowledge cultural industries as an economic power and further include them in their agendas as cultural quarter policies. The trend has been that the more the city government invoin leisure and cultural activities, the less deprived quarters there will be. Supporting arts and culture became a tool in town regeneration. The best example of such strategy has been often quoted Glasgow that turned from grey industrial town with high unemployment rate to vibrant cultural hub in the beginning of 1990s

The shift from cultural industries via cultural quarter policies to creative industries took place in 1990s. Further deepening and modification of aforementioned concepts gave rise to the *creative industries* concept. The term creative industries encompasses a broader range of activities which include the cultural industries plus all cultural or artistic production, whether live or produced as an individual unit. The creative industries are those in which the product or service contains a substantial element of artistic or creative endeavor and include activities such as architecture and advertising.⁴

The creative industries concept is based on the business cluster argument that

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³ Hesmondhalgh, D.;Pratt,A, p.3.

⁴ UNESCO/ Global Alliance Team. Understanding Creative Industries – Cultural Statistics for public-policy making (February 2006).

companies with similar or related specialization tend to cluster in one place or around one central area. The creative clusters therefore provide space for a new perception on the economy and its management for 21st century. According to Hans Mommas⁵ the creative clusters represent a next step to capitalize on arts and culture by making suitable urban development strategies for the regions or cities regeneration.

This thesis was further developed by Richard Florida who argues that once there is appropriate creative industries infrastructure and positive urban development leading to opening new galleries, theaters, cultural centers etc., the areas will be more attractive to the members of *creative class*.

Concept of the Creative Class

Richard Florida published a bestseller *The Rise of the Creative Class-and how it's transforming work, leisure, community and everyday life* in 2002. Florida believes that becomes the advanced nations find themselves in information-based and knowledge-based economies the key driver of the economy is human creativity. 'Knowledge' and 'information' are the tools and materials of creativity. His concept of measuring the economic impact of the creative class has been used by many cities and states.

Florida divides society into three classes: service class, working class and creative class.⁶ According to Florida, the distinguishing characteristic of the creative class is that its members engage in work whose function is to "create meaningful new forms" The super-creative core of this new class includes scientists and engineers, university professors, poets and novelists, artists, entertainers, actors, designers, and architects, as well as the "thought leadership" of modern society: nonfiction writers, editors, cultural figures, think-tank researchers, analysts, and other opinion-makers. Members of this super-creative core produce new forms or designs that are readily transferable and broadly useful--such as designing a product that can be widely made, sold and used; coming up with a theorem or strategy that can be applied in many cases; or composing

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⁵ Mommaas,H. "Cultural Clusters and Post-industrial City: Towards the Remapping of Urban Cultural Policy. *Urban Studies*, Vol.41, No.3, (March 2004), pp.507-532.

⁶ For detailed description please see Att.1.

music that can be performed again and again.⁷ Further, Florida argues that the creative class develops new societal norms. The members of the creative class are diverse across the dimensions of age, ethnicity and race, marital status, and sexual preference. An effective people climate⁸ needs to emphasize openness and diversity, and to help reinforce low barriers to entry. Florida lists several characteristics⁹ for the creative class that can be also perceived as transformational patterns that are fundamental to the creative economy:

- 1.) No-White Collar Workplace- such workplace replaces traditional hierarchical systems of control with new forms of self-management, peer recognition and pressure and intrinsic forms of motivation; per strive to work more independently; creation of new environments
- 2.) Experiential Lifestyle demanding life bui round creative experiences; blending work and leisure together; one person can be simultaneously a wind an engineer
- 3.) <u>Time warp</u> the perception of time has completely morphed; intensification of time; people of all ages continues to seek new outlets for their creative capacities; creativity cannot be switched off
- 4.) The Creative Community a place that enables us to reflect and reinforce our identities as creative people, pursuing the kind of work we choose and having ready access to a wide range of lifestyle amenities

Richard Florida argues that there are three fundamental elements that support the social structure of creativity and therefore are crucial to the successful existence of the creative economy.

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⁷ Florida, R. The Rise of the Creative Class. Basic Books, 2002, p.5.

⁸ By Effective people climate Florida means a general strategy aimed at attracting and retaining peopleespecially, but not limited to, creative people. This entails remaining open to diversity and actively working to cultivate it, and investing in the lifestyle amenities that people really want and use often, as opposed to using financial incentives to attract companies, build professional sports stadiums, or develop retail complexes.

⁹ Ibid,pp.12-16.

1.) New systems for Technological Creativity and Entrepreneurship

The availability of *venture capital* for financing research, new firms formations or commercial innovations is detriportal to the existence of the creative economy. Florida argues that the venture capital is needed where there is creativity potential in existence.¹⁰

2.) New and more effective models for producing goods and services

The Creative Factory and Modular Manufacturing are another key elements of creative economy. Not just the laboratory but the factory itself can be an arena for creative work. Factory workers, given the chance, often are the ones who come up with basic improvements in productivity and performance. Modular manufacturing model is based on the specialized subcontractors and it lets the company itself to concentrate on new innovations, concepts and designs. By subcontracting the creative company is not burdened by the organization of work itself.¹¹

3.) A broad social, cultural and geographic milieu conducive to creativity of all sorts

This element has received the least attention but is the most crucial to
the creative economy. Supportive social milieu that is open to all new forms of
creativity- artistic and cultural as well as technological and economic. This milieu
provides the underlying eco-system or habitat in which the multidimensional
forms of creativity take root and flourish. By supporting lifestyle and cultural
institutions like a cutting-edge music scene or vibrant artistic community, for
instance it helps to attract and stimulate those who create business and
technology. By attracting different kinds of people, the mechanism of
transmission of knowledge and ideas is facilitated.

Creativity Index

As we have listed the main features and conditions for the existence of the conomy, we can now introduce Florida's key original concept of the Creativity Index that has been widely used by several states and cities to raise their economic outputs. The key to economic growth lies not just in the ability to attract the creative class, but to translate that underlying advantage into creative economic outcomes in the form of new ideas,

¹⁰ Florida, p.54.

¹¹ Ibid,p.50-55.

¹² Ibid.

new high-tech businesses and regional growth.¹³ The Creativity Index is a mix of four equally weighted factors:

- the creative class share of the workforce
- high-tech industry, using the Milken Institute's widely accepted Tech Pole Index / the High-Tech Index
- -innovation, measured as patents per capita
- diversity measured by the Gay Index, a reasonable proxy, for an area's openness to different kinds of people and ideas

This composite indicator can show how the region is performing in comparison to other areas. It is a baseline indicator of a region's overall standing in the creative economy. The Creativity index also shows the long run economic potential in region's competitiveness or our purposs we have decided to indicate only one factor – a share of creative class workforce –as a pivotal condition to the economic growth. For the purpose of this paper, our assumption is that the higher share of creative class workforce, the higher economic growth for the area.



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¹³ Florida,p.244.

II. REGRESSION ANALYSIS

Regression analysis is a statistical tool that helps researches observe general trends from a large amount of data. It studies relationship between two variables and attempts to ascertain that there is a correlation between them. Without regression, it would be almost impossible to draw conclusions and make predictions and studies including a lot of data would be much less conclusive. On the other hand, it is important to realize that regression analysis has certain drawbacks as well, the most important one being the fact that the regression can confirm correlation between two variables yet it cannot prove causation – which is what all researchers are usually concerned with.

The regression analysis that is a part of this study concentrates on one particular indicator of creative index - the creative class share of the workforce. The goal of the analysis is to establish a correlative relationship between the size of the creative class and the real gross state product per capita. We included all 50 states plus the District of Columbia and worked with two sets of data: one from 1990 and the second from 2000.

According to the previously mentioned theory by Richard Florida, the bigger the creative class the higher economic growth should be. If this theory is valid, the regression analysis should find a positive correlation between the two variables.

A variety of sources were used for collecting data needed for the analysis; the three most important sets of data were gross state product, population by state, and the size of a creative class. The gross state product (GSP) is a measurement of the economic output of a state. The GSP data for the year 1990 and 2000 that we used in the analysis was taken from the US Census. ¹⁴ It operates with real (2000) US dollars, and is therefore adjusted for inflation.

In order to calculate the real GSP per capita, we divided GSP for each state by the state's population. Information on the size of population per state for 1990 and 2000 was taken from the US Census, too. 15 The calculations revealed a great

¹⁴ The 2006 Statistical Abstract. *United States Census Bureau* Available at http://www.census.gov/compendia/statab/2006/tables/06s0654.xls (Accessed on May 4, 2012).

¹⁵ Population of States and Counties of the United States: 1790 to 1990. *United States Census Bureau*. Available at http://www.census.gov/population/www/censusdata/pop1790-1990.html (Accessed on May 4, 2012).

disproportionality in economic growth among US states. While Oregon, New Mexico, Colorado, South Dakota, New Hampshire, and Idaho experienced a sharp increase in their GSP (all more than 40% increase), GSP of states like Wyoming and Louisiana increased by mere 5% and GSP of Hawaii and Alaska actually decreased (Hawaii by 10,41% and Alaska by 24,13%).

The information about the size of a creative class proved to be the most difficult data set to find. The figures finally used in the regression analysis come from the Economic Research Service (ERS) of the United States Department of Agriculture. ¹⁶ In 2007, the ERS conducted a study with an aim to prove that people employed in creative occupations are drawn to areas that provide a high quality of life. It collected data for all 3,139 US counties (but focused primarily on rural areas) and used natural amenities as quality-of-life indicators. The study concluded with a recommendation that rural areas should invest into programs that attempt to attract members of creative class if they wish to reverse the current brain-drain trend (talented people leaving rural areas for big cities). The ERS calculated the creative class size as the percentage of those working in creative occupations. It identified creative occupations as those "developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions." The specific occupation description was taken from the Bureau of Labor Statistics of the US Department of Labor which also identified the skills generally needed in these occupations. The ERS subsequently chose only those occupations that were deemed to require a high level of "thinking creatively." Those occupations included (among others) top executives, financial managers, accountants and auditors, computer specialists, engineers, architects, lawyers, art and design workers, sales representatives, postsecondary teachers, media and communication workers. The ERS then calculated the share of the employed population 16 years and older in creative occupations for each US county

each os county

Selected Historical Decennial Census Population and Housing Counts. *United States Census Bureau* [online] http://www.census.gov/compendia/statab/2006/tables/06s0654.xls (Accessed on May 4, 2012). Ranking Tables for States: Population in 2000 and Population Change from 1990 to 2000. *United States Census Bureau* [online] http://www.census.gov/population/www/cen2000/briefs/phc-t2/index.html (Accessed on May 4, 2012).

16 Creative Class County Codes. *Economic Research Service of US Department of Agriculture* [online] October 17, 2007 http://www.ers.usda.gov/data/creativeclasscodes/, (Accessed on May 4, 2012).

We subsequently used this data to calculate the creative class size in 1990 and 2000 each of the 50 states plus the District of Columbia by adding up the figures for individual counties. The highest share of people employed in creative occupations has traditionally been in Washington, D.C. and in the North East states, particularly in Connecticut, New Jersey, Massachusetts, and Rhode Island. On the other end of the scale, the states with the lowest share of creative occupations include Kentucky, Arkansas, Nebraska, and North Dakota. The states that experienced the highest increase in the size of creative class between 1990 and 2000 are Washington D.C. (+8,42%), Rhode Island (+5,04%), New Jersey (+4,3%), Utah (4,19%), Washington (4,15%), and Colorado (+4,11%).

Our regression analysis employed two variables: an independent variable (the share of people employed in creative occupations) and a dependent variable (real GSP per capita). The results of the analysis were two graphs (see Attachment 2) with linear trend lines showing the relationship between the two variables.

1990	2000
y = 1920.6x – 2621.8	y = 1897.2x – 1886
$R^2 = 0.4246$	$R^2 = 0.577$

The equations of the two linear trend lines demonstrate that there is a positive relationship between the two variables. The values 1920.6 and 1897.2 represent the positive slope of the two trend lines. They can be interpreted as the dollar increase in GSP per 1% increase in creative class share; thus for 1% increase in creative class share, the GSP rose by \$1920.6 USD in 1990 and by \$1897. The two numbers (the two slopes) are almost identical which proves the accuracy of the calculations. The parameter R² is a measurement of the strength of linear relationship; it is a tool to measure the "goodness of fit" of a statistical model or a "statistical significance" and it shows how well the resulting trade line fits the set of observation. If the R² were 0, there would be no relationship and no observations could be made. The values of 0.4246 and 0.577 demonstrate that our results are somewhat reliable and that further conclusions can be

drawn from them. The results of this regression analysis support the creative class thesis as formulated by Richard Florida.

III. COMPARATIVE CASE STUDY

COLORADO AND LOUSIANA

Throughout our analysis, two states proved to be particularly interesting. Looking at the regression analysis data, one could not help but notice that Colorado was a prime example of a state that had been quite successful economically, whereas Louisiana stood at the very opposite end.

Even though the real GSP per capita in 1990 was slightly higher in Louisiana (\$28,850) than in Colorado (\$27,728), Louisiana did not keep up with Colorado in its consistent economic growth and considerably fell behind. Among the 50 US states plus the District of Columbia, Louisiana ranked 16th in real GSP per capita in 1990 but fell down to the 37th place in 2000, while Colorado went from the 18th to the 8th position. In 2000, the real GSP per capita was \$39,840 in Colorado and only \$30,153; this corresponds with the economic growth of 43.68% in Colorado and 4.52% in Louisiana over the ten-year period.

Even though there are multiple possible factors influencing economic performance of a state, Florida's theory of creative class suggests that it is linked to, among other creative index indicators, the size of a creative class. Did the economic growth of Colorado go hand in hand with increasing share of people employed in creative occupation. Not surprisingly, it did. While only 18.51% of people over the age of 16 worked in creative occupations in 1990, this share grew to 22.62% by 2000 (an increase of 4.11%).

Louisiana experienced an opposite trend. Its creative class size increased by mere 2.34% over the ten years from 13.33% to 15.67%. This is one of the lowest increases in the share of people employed in creative occupations in the country; in fact only 6 other states (Oklahoma, Missouri, New Mexico, Florida, Kansas, and Nevada) performed worse than Louisiana did.

The example of Colorado and Louisiana proves once again that there is a correlative relationship between economic growth and the size of a creative class. Even though Louisiana and Colorado performed almost identically in 1990, the economy of Louisiana did not grow nearly as fast as did the economy of Colorado over the ten-year-long period.

There are various possibilities how to compare two states, regions or cities in regard to the creativity of its population. One of the tools used by Richard Florida is the *Creativity* Index, measuring the percentage of people working in the creative industries. According to the Florida's measurements from 2003, Colorado ranked 6th and Louisiana 39th (Attachment 5). These rankings can vary from ours because of use of the data between 1990 and 2000 and also the slightly different methodology than Florida's. Second tool is a High-Tech Index, also called State Technology and Science Index. This index basically works with data concerning research and development, human capital investments, risk capit ntrepreneurial infrastructure etc. According to it Colorado ranks as 3rd and Louisiana as 45th in the country.¹⁷ One of the best known tools is the Gay Index or Diversity Index. It shows us the percentage of gay people living and working in the area (they do not have to work directly in creative industries, although it is often the case). The basic logic works here, the higher the percentage of gay population there is, the more attractive region for the creative class it is, because the society is probably more open and diverse, ready for new ideas and concepts. What is very interesting is the fact that the higher the percentage of gay people is, the higher the hourly earnings are in the whole society in the area, not only in the gay community (Attachment 6). The data concerning gay population is again favorable to Colorado (e.g. the percentage of gay couples who are at the same time interracial is 24-53% in Colorado, compared to 13-14% in Louisiana; for gay index v. hourly earnings see Attachment 6 & 7). Another tool that researchers can use is the Patent per Capita Indicator, measuring the number of patents per 1000 people. Colorado ranks as 15th with 6,7 patents per 1000 people and 2102 patents in 2011 compared to Louisiana's 39th place with 2,6 patents per 1000 people and 308 patents in 2011 (this number even decreased from 518 patents in

¹⁷ Devol,R; Charuworn,A. State Technology and Science Index. Milken Institute Report (June 2008).

2000).¹⁸ We did not really focus on the relationship between the higher education and rise of creative class or GSP, but this data is valuable if we try to get a complex idea about the given populations. In Colorado, the percentage of graduate people is 53,3% and the state ranks as 29th whereas Louisiana happens to be 47th with 40,7% of graduate population.

Looking at both states, their population is of comparable size, Colorado has 5,11 millions inhabitants and Louisiana 4,57 millions. But there the similarity ends as we have already shown above.

We made also a small "experiment" yping the words "Colorado creativity" and "Louisiana creativity" into Google search to see if there will be a difference of the type of results. The outcome was following, for Colorado, Google search found 8.410.000 results while for Louisiana, there was 4.690.000 results. The webpages or articles found for Colorado were really connected to creative industry, creative economy or Colorado Council on the Arts programs supporting the creative cluster. Louisiana connected information were related to personal creativity coaches, classes of creative writing at Louisiana State University and again personal coaching agencies. We do not pretend that this was a highly scientific experiment, that is for sure, but we think it is an interesting and simple example of the difference between these two states.

Colorado and creativity

In the state of Colorado, the creative class represents 122.000 individuals in about 8.000 establishments, it is actually the 5th largest employment sector and 3,9% of the sectors as estimated 3,2 million jobs. Annually the creative class generates approximately 5 billion \$. What is quite remarkable is the position of Colorado as the 5th state with the highest concentration of artists in the whole U.S. after New York, California, Massachusetts and Vermont. It also ranks second in the concentration of architects, 7th in the concentration of writers, designers, entertainers and performers and 8th in the concentration of photographers.

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¹⁸ U.S. Patent and Trademark Office. Available at: http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_utl.htm (Accessed May 5th, 2012).

There are various state programs supporting the creative economy in many ways and on different levels. To have a better idea of how these programs can look, we will briefly describe some of them.

• The Colorado Creative District program

This program offers to selected districtions coess to grant funding, which is quite crucial for this sector, at least in its beginnings. The networking and training programs are also important because they help the district employees to learn the best practices for district development and sustainability and to network with other state agencies and potential partners. The program also gives the districts the access to advocacy tools such as the Creative Vitality Index, which is a new web tool that offers to users to log in and then access a variety of reports, data and statistics. Equally important is the technical support, providing the districts with the help of professionals in many different areas such as urban planning, district management, organizational capacity or finance and marketing.

• The Peer Assistance Network

Offers affordable and accessible technical assistance service to Colorado's non-profit arts organizations. Its purpose is to increase the stability of Colorado's Arts organizations and the quality of the arts programs they present. It provides a way for the staff and board members of arts organizations to help each other and the artists in their communities by exchanging advice between peers who manage similar programs and projects in other areas of the state.

• Art in Public Spaces Act

This is quite unique concept, requiring allocation of one percent of capital construction funds for new or renovated state buildings for the acquisition of works of art for the project sit hese art acquisitions form the state art collection, developed and administered by the Colorado Creative Industries. The works selected through this program represent great diversity in style, imagery, materials and techniques.

START

Supports in-school arts learning not only in the arts classes but also in other subjects of K-12 students.

Colorado Creates Grants

Promotes cultural, educational and economic growth through statewide investment in creative activities and organizations.

These are some of the original state programs, but there are also tax credits that are not rare at all. To give some examples, we may briefly describe the two followings:

- The Sound Recording Investor Tax Credit Program
 Rebates a 25% refundable tax credit on qualified production expenditures for state-certified sound recording projects.
 - The Motion Picture Industry Development Tax Credit

Provides a 30% tax credit on qualified motion picture expenditures with no project or program caps. Payroll expenditures for Louipa residents qualify for an additional 5% tax credit (35% effective total credit rate).

If we ask who is responsible for the support of creative economy in the state of Colorado, it is the Colorado Creative Industries (mentioned above), a division of the Colorado Office of Economic Development and International Trade. The district "sees a future where Colorado is a premiere "Creative Economy" with a strong brand identity, a Top 10 reputation, and significant and sustained investment in the creative sector, and where Creative entrepreneurs and enterprises will flourish and we will "grow our own" creative workforce." ¹⁹

The money spent annually by the Colorado Creative Industries varied from \$833,000 in 2004 to almost \$2,6 million in 2010. We can see that the state of Colorado has a comprehensive policy and also the financial means to support the development of the creative class and creative economy and that it clearly realizes the importance of both for the economic performance and quality of life in the state.

Louisiana and creativity

Looking at the state of Louisiana, one cannot help but notice the difference in the approach to the creative class. There is a complete lack of political will to continuously support the growth of the creative class. The only official document of the

¹⁹ *Missions and Goals*, official webpage of Colorado Creative Industries, Available at http://www.coloradocreativeindustries.org/about/mission/index.htm, (Accessed on May 5, 2012).

Louisiana state concerning the creative economy was the reproduction of a speech given by former Lieutenant Governor, Mitchell J. Landrieu in 2009, announcing the preparation of new Cultural Economy Initiative. But less than a year after that announcement, Mr. Landrieu left the office and it seems nobody really continued with his initiative as far as the official webpage informs.

The absence of policies promoting the creative economy, except two tax credits (Digital Media and Software Incentive, Motion Picture Industry Development Tax credit) is striking. The Louisiana Department of Culture, Recreation and Tourism be in my opinion renamed to Louisiana Department of Tourism and Jazz, because these two areas seem to catch all the attention of the department.

The eight key industries defined by the Economic department of Louisiana²⁰ are advanced manufacturing, agribusiness, clean-tech, energy, specialist healthcare, water management, digital media and software and entertainment. Only the last two industries can be seen as a part of creative economy, but still, there are no comprehensive programs for these areas.

The case of Louisiana is an interesting example of a state that does not invest sufficiently into creative class. One of the possible explanations of this lack of emphasis on innovation and investment is the fact that the economy of Louisiana is heavily dependent on tourism (as mentioned above) and oil/natural gas industry. The state of Louisiana has enjoyed relatively high levels of tourism – people are especially drawn to culturally rich New Orleans with abundance of music, food, and cultural festivals. Furthermore, Louisiana produces over one-quarter of US supplies of natural gas and contains about 10% of all known US reserves of oil.²¹

These two types of industries constitute a source of "easy money" for Louisiana as relatively high levels of revenues are accomplished without much effort. States that lack natural resources or/and that do not have strong tourism industry are forced to innovate and invest into R&D in order to stay competitive, thus securing their future

21 Louisiana Economy. *Division of Administration – State of Louisiana*. Available at http://doa.louisiana.gov/about economy.htm> (Accessed on May 30, 2012).

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²⁰ Key Industries, official webpage of Louisiana Economic Department, available at http://www.louisianaeconomicdevelopment.com/key-industries.aspx, (Accessed on May 5, 2012).

economic growth. One could say that Louisiana rests on its laure hich might prove even more damaging in the future.

IV. CONCLUSION

The above regression analysis and the two case studies (Colorado and Louisiana) clearly support Richard Florida's theory about the economic importance of creative class: Economic growth goes hand in hand with increasing share of people employed in creative occupations. Local and state governments are therefore encouraged to invest into programs promoting creative industries and attracting people in creative occupations as this will most probably lead to better economic performance in the future.

The emphasis that this study puts on creative class should, however, not be exaggerated. For a state to be successful it needs to diversify its economy and it should not give preference to creative industry at the expense of manufacturing sector. Manufacturing is crucial for research and development and as such should not be underestimate.

If one wanted to further pursue the study of creativity and its impact on economic growth, it would certainly be interesting to look not only at what role the size of a creative class plays but also what the role of other classes is. A similar regression analysis studying the relationship between the economic growth and the size of a service and/or working class would shed more light on how modern economies function and would help governments understand which segments of economy should be encouraged.



Attachment 1: Defining the Classes according to Florida

Creative Class:

Super-creative core: computer and mathematical occupations; architecture and

engineering occupations; life, physical and social science occupations; education,

training and library occupations; arts and design, entertainment, sport, and media

occupations

Creative Professionals: Management occupations; Business and financial operations

occupations; Legal occupations; Healthcare practitioners and technical occupations;

High-end sales and sales management

Working Class: Concstruction and exctraction occupations; Installation, maintenance,

and repair occupations; Production occupations; Transportation and material moving

occupations; Transportation and material moving occupations

Service class: Health care support occupations; Food preparation and food-service-

related occupations; Building and grounds cleaning and maintenance occupations;

Personal care and service occupations; Low-end sales and related occupations; Office

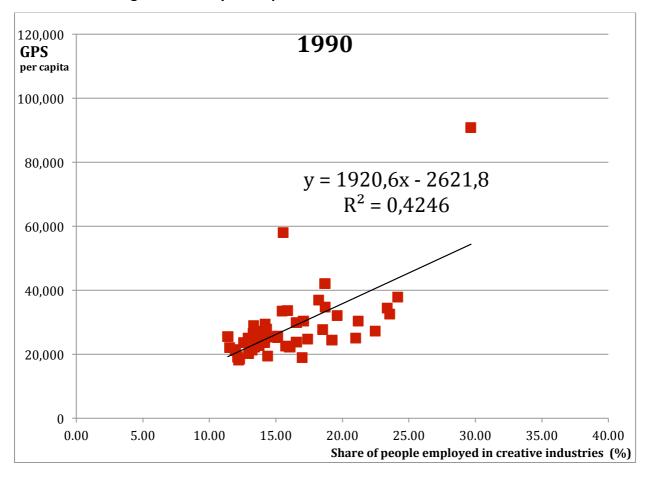
and administrative support occupations; Community and social services occupations;

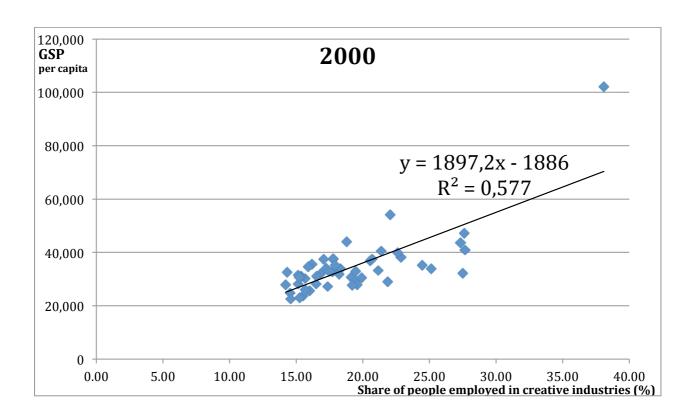
Protective service occupations

Agriculture: Farming, Fishing, Forestry occupations

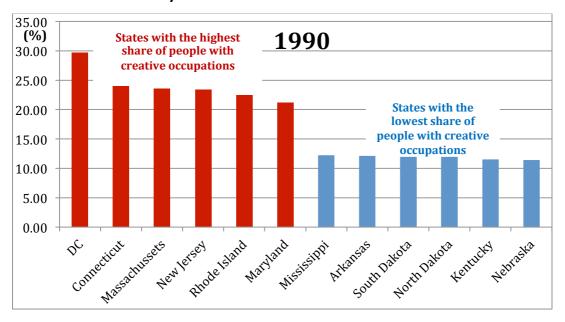
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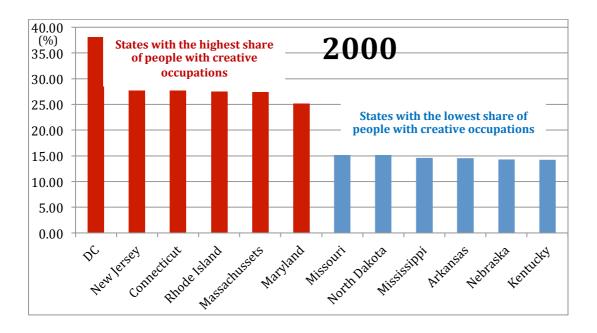
Attachment 2: Regression Analysis Graphs for 1990 and 2000



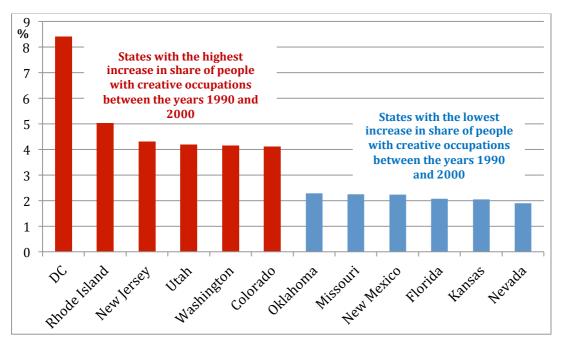


Attachment 3: Creativity in 1990 and 2000





Attachment 4: Increase in creative class size between 1990 and 2000



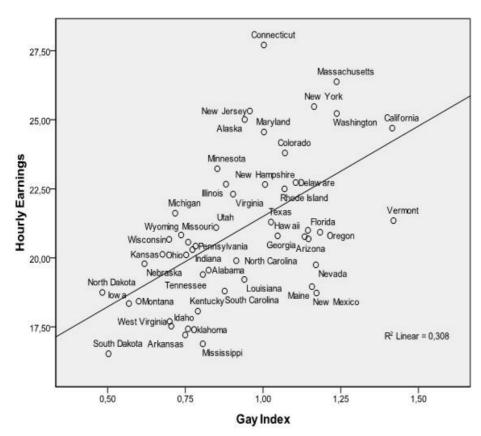
Attachment 5: Creative Index Ranking in 2003

Overall State Creativity Ranking

Overall Rank	State	Creativity Index
1	Massachusetts	188
2	California	184
3	New York	178
4	Connecticut	167
5	Texas	163
6	Colorado	161
6	Washington	161
8	New Jersey	158
9	Arizona	145
10	Maryland	144
11	Illinois	143
12	Oregon	140
12	Virginia	140
14	Minnesota	139
15	Delaware	138
16	New Hampshire	137
17	Florida	131
18	Georgia	129
19	Pennsylvania	125
20	New Mexico	119
21	ldaho	115
22	Rhode Island	109
23	Vermont	105
24	Utah	104
25	Michigan	103

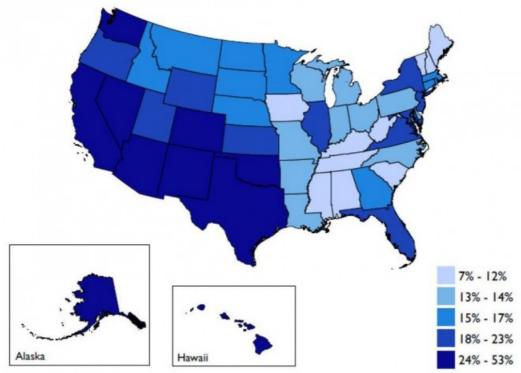
Overall	Ctata	Creativity
Rank	State	Index
25	North Carolina	103
27	Ohio	93
28	Missouri	89
29	Maine	87
30	Nevada	79
31	Oklahoma	78
32	Indiana	76
32	Wisconsin	76
34	Alabama	75
35	Kansas	73
36	Alaska	72
37	South Carolina	71
38	Tennessee	68
39	Louisiana	67
40	lowa	62
41	Montana	60
42	Hawaii	58
43	Nebraska	55
44	North Dakota	48
45	Kentucky	40
46	West Virginia	35
47	Arkansas	31
47	Wyoming	31
49	Mississippi	30
50	South Dakota	17

Attachment 6.: Gay Index and hourly earnings



Source: Florida, R. Working Smart for the Money, April 10^{th} 2010. Available at http://www.creativeclass.com/ v3/creative class/2010/04/10/working-smart-for-the-money/.





Source: Gates,G. Percent of same-sex couples who are interracial or interethnic. The Williams Institute, April 2012. Available at http://williamsinstitute.law.ucla.edu/research/census-lgbt-demographics-studies/same-sex-couples-census-2010-race-ethnicity/.

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