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What is behind the growth in trademark filings? An analysis of United States data

Background research for the World IP Report 2013

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What is behind the growth in trademark filings? An analysis of United States data

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Abstract

Demand for registered U.S. trademarks has grown substantially over the past 25 years in absolute terms and relative to overall economic growth. Trademark filings grew at an average annual rate of 6.5 percent between 1985 and 2011, outpacing real GDP growth and implying intensified use of trademarks in the U.S. economy. Prepared as background for the WIPO 2013 *World Intellectual Property Report: Branding in the Knowledge Economy*, this paper presents descriptive analysis of U.S. trademark data and discusses potential drivers of escalating demand. Trends suggest that introduction of intent-to-use applications spurred filings but had less impact on registration growth. No other distinct driver of trademark demand emerges, though descriptive analysis shows service classes accounting for an increasing proportion of new filings and relative declining demand from high-income countries being offset by growing demand from middle-income countries.

Keywords: Intellectual Property Rights, Trademarks

JEL Classification Numbers: O3

1 Introduction

Demand for federally registered U.S. trademarks has grown substantially over the past 25 years in absolute terms and relative to overall economic activity. While real gross domestic product (GDP) grew at an average annual rate of 2.8 percent between 1985 and 2011, trademark filings increased 6.5 percent per year on average, suggesting intensified use of trademarks in the U.S. economy.¹ This trend is not isolated to the United States. The 2011 World Intellectual Property Office (WIPO) World Intellectual Property (IP) Report showed a surge in trademark applications worldwide, yet stressed that the drivers of intensifying trademark demand remain relatively unexamined.² The 2013 WIPO World IP Report addresses this paucity of analysis by exploring the main drivers of global trademark growth.³ This paper, prepared as background for the WIPO report⁴, presents descriptive analysis on the growth in applications for U.S. trademark registration during 1985 to 2011 period.⁵ It analyzes trends and discusses potential drivers of demand using the 2012 release of the USPTO Trademark Case Files Dataset, a comprehensive dataset of application-level data.⁶

Aggregate trends show both applications and registrations growing faster than overall economic activity, implying intensified demand for, and use of, trademarks in the U.S. economy. Introduction of intent-to-use applications appears to have spurred filings but had less impact on registration growth. No other distinct driver of trademark demand emerges, though descriptive analysis shows that service classes, particularly class 35 (advertising and business services), comprise an increasing proportion of new filings. While demand among U.S. residents for trademark protection far outweighs foreign demand in absolute terms, resident and non-resident applications have grown at roughly the same pace. Still, filings from high-income countries show signs of relative decline while middle-income countries account for growing shares of non-resident

¹ GDP growth rate calculated from Real GDP in the United States (USARGDPR) from the Federal Reserve Bank of St. Louis, available at <http://research.stlouisfed.org/fred2/series/USARGDPR>.

² See WIPO (2011) *World Intellectual Property Report: The Changing Face of Innovation*, available at http://www.wipo.int/econ_stat/en/economics/wipr/.

³ See WIPO (2013) *World Intellectual Property Report: Branding in the Knowledge Economy* (forthcoming).

⁴ Graphs and discussion were compiled according to the outline proposed by the WIPO Office of the Chief Economist. While we conducted preliminary analysis of registrations for each inquiry, results were often similar or equivalent to those for applications. Thus, we opted to include graphs and/or discussion on registrations only where results differ.

⁵ Throughout this document, we refer to registration on the Principal Register only, omitting applications that filed or were amended to file for registration on the Supplemental Register. See 15 U.S.C. §§ 1052 and 1091. A trademark registered on the Principal Register is entitled to all rights provided by the Lanham Act.

⁶ See Graham, S., Hancock, G., Marco, A. and Myers, A. (2013). "The USPTO Trademark Case Files Dataset: Descriptions, Lessons, and Insights." SSRN working paper, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2188621 ("Case Files").

applications. No particular mark design type (pure word, logo, etc.) stands out as driver of application growth. The number of classes per application and the maintenance and renewal rates for trademark registrations have held fairly stable even as demand intensified.

2 Aggregate trend

In recent decades, demand for federally registered U.S. trademarks has grown considerably. Figure 1 shows the strong upward trend in trademark applications filed with the United States Patent and Trademark Office (USPTO). Since 1985, applications have increased almost six-fold, and newly issued registrations have more than tripled. Fluctuations in the trend suggest that trademark demand is correlated with economic cycles. For example, applications peaked in 1999 and 2000, implying amplified demand for new registrations during the dot-com boom. Following post-bubble declines in 2001 and 2002, new filings resumed growth at a slower pace than prior to the boom. Applications peaked again at an unprecedented volume in 2007 just before the onset of the financial crisis. Demand fell through the downturn, but new filings recovered to near-pre-crisis levels by 2011.

As Figure 1 indicates, a sizeable portion of applications filed with the USPTO are not registered.⁷ In the United States, an entity must use a mark on, or in connection with, goods or services in order to establish and maintain trademark rights.⁸ This use requirement derives from American common law and subsequent codification in federal statute.⁹ Prior to 1989, use of a mark in commerce was required upon filing for registration¹⁰, and allowance rates held near 80 percent because a relatively small share

⁷ Note that the decline in registrations for the most recent filing year cohorts in Figures 1, 2, and 3 reflects censoring from unobserved disposal (through registration allowance or application abandonment). About 3.1 percent of applications filed with USPTO between 1985 and 2011 were pending as of the data generation date. Median time to disposal for registered or abandoned applications is 1.4 years with 96 percent of observed disposals occurring within 4 years of filing.

⁸ The use requirement does not initially apply to some registrations. To comply with treaty obligations, the U.S. trademark system allows for registration on the basis of a prior application or registration in a foreign jurisdiction under the Paris Convention or domestic extension of an international registration issued under the Madrid Protocol. *See* TMEP §§ 1000 and 1900. An application filed based on foreign priority or international registration is registrable without actual use though the applicant is required to file a declaration of intent to use the mark in U.S. commerce. Thus, we group such filings under intent-to-use in Figure 2. Applications filed on the basis of foreign priority or international registration comprise about 7.0 percent total filings between 1985 and 2011.

⁹ 15 U.S.C. § 1051 et seq. *See* Case Files § 3.

¹⁰ To apply for registration with the USPTO, an applicant must state a legal basis for filing for each class. Prior to 1989, the sole basis was “use in commerce.” To file under the “use” basis, the owner must submit a

of applications were refused registration based on absolute or relative grounds.¹¹ “Intent-to-use” applications were introduced in late 1989 permitting applicants to file based on a bona fide intent to use the mark in commerce, but requiring use be established to obtain registration.¹² The initial upswing in filings in Figure 1 coincides with introduction of this option.

Figure 2 displays the rapid rise in intent-to-use applications over the past two decades. Despite this surge, applications filed based on use remain a majority of registrations issued each year as most intent-to-use applications are abandoned prior to issuance. Higher abandonment rates for applications filed based on intent to use, relative to those for applications filed based on actual use, may reflect the greater value that firms derive from marks already established in the marketplace as well as from applicant practice to seek protection for prototype marks that are not timely deployed. Still, while some of the recent increase in trademark demand stems from intent-to-use applications that do not reach registration, Figure 2 shows an upward trend in filings based on use since the mid-1990s as well as in registrations resulting from both use and intent-to-use applications.

Clearly surging in absolute terms, trademark applications and registrations have also grown faster than overall economic activity. Figure 3 shows that increases in applications and registrations have outpaced real GDP growth, though filings exhibit much stronger relative growth. Still, upward trends for applications and registrations in Figure 3 imply intensifying demand and use of trademarks in the U.S. economy.

3 Which classes account for the growth in trademark filings?

Between 1985 and 2011, applicants filed for U.S. registration in a total of 6.3 million goods and services classes.¹³ Filings for each Nice Class increased in absolute terms over the period, though average annual growth rates varied across classes, ranging from 3.7 to 12.9 percent. Figure 4 shows the share of total class filings between 1985 and 2011

declaration stating that, as of the filing date, the mark is used in commerce that Congress can regulate, i.e., interstate commerce or commerce between the United States and foreign nations. *See* Case Files § 4.1.3.

¹¹ *See* Case Files § 4.1.4.

¹² Intent-to-use applications were introduced per the Trademark Law Revision Act of 1988 and implemented on November 16, 1989. 15 U.S.C § 1051(b). *See* Case Files § 4.1.4.

¹³ All graphs and discussion of growth by Nice Class excludes applications to register certification and collective marks. The USPTO applies unique U.S. classes to certification and collective membership marks. While collective goods marks and collective service marks are classified in Nice Classes, we opt to exclude them to be consistent with our treatment of collective membership marks. Applications to register certification or collective marks comprise about 0.2 percent of total class filings between 1985 and 2011.

by Nice Class. While class 9 (electrical and scientific apparatus) accounts for the largest share of total filings, class 35 (advertising and business services) has grown more (in both absolute and percent terms) than any other single class. Since the mid-1990s, class 35 has grown as a proportion of incoming applications while class 9 has declined so that each comprised about 11 percent of 2011 filings (see Figure 5). Class 41 (education and entertainment services) also shows strong relative growth, and, together, services classes 42 (scientific and technology), 43 (hotels and restaurants), 44 (medical, beauty, and agricultural), and 45 (legal and security), account for 11.0 percent of total class filings and an increasing share of incoming applications over the last decade.¹⁴ By contrast, class 25 (clothing) has grown largely proportional to total applications and class 16 (paper and printed materials), while accounting for nearly 6 percent of total filings, has declined the most in proportion to all other classes. Overall, goods classes remain dominant in terms of total volume (see Figure 6), but service classes account for an increasing share of new filings. Applications for service classes averaged 9.7 percent annual growth between 1985 and 2011, compared to 6.1 percent for goods classes, and comprised 42.0 percent of the 2011 filing year cohort.

Figure 7 presents the average annual growth in class filings by industry sector categories.¹⁵ Management, Communications, Real Estate, and Financial Services was the fastest growing industry for U.S. trademark filings between 1985 and 2011. Figure 6 suggests that demand for trademark registrations has also increased rapidly in the Pharmaceutical, Health, Cosmetics sectors and Agricultural Products and Services. Given that there is, at present, no straightforward correspondence between Nice classes and industries, there is no single, unambiguous driver of rapid growth in these sectors (or classes). Clearly, firm entry or product line expansion into these sectors may prompt firms to seek protection for new marks or extend rights in existing marks onto additional goods and services. At the same time, established firms in these sectors may be attempting to enhance brand recognition by filing to register variations of existing word marks or logos (e.g. design only version of logo). Growth may also reflect increasing turnover of trademarks and/or products in these sectors. Trademark filings may not reflect the principal business activity in these sectors at all. Rather, demand may stem

¹⁴ We consolidate these classes to account for the restructuring of services classes in 2002. Prior to January 1, 2002, class 42 served as a catch-all for “services that cannot be classified in other classes”. The 8th edition of the Nice Classifications limited class 42 and created classes 43, 44, and 45 to cover services previously classified in class 42.

¹⁵ Per WIPO’s outline, class filings were grouped into industry sector categories developed by Edital[®], a company specializing in trademark information. The Nice Class to industry sector category concordance is available in Annex B of http://www.wipo.int/freepublications/en/intproperty/941/wipo_pub_941_2012.pdf.

from firms across industries adopting new channels through which goods and services are sold and utilizing marks in novel ways.

This last point is particularly germane to the Management, Communications, Real Estate, and Financial Services category because it includes class 35 which encompasses all retail stores. For example, “CALLAWAY GOLF” is registered in class 35 for “retail golf shops featuring golf related items”¹⁶ and separately for “computerized, online retail services in the field of golf equipment and accessories...”¹⁷ Under the North American Industry Classification System (NAICS), Callaway Golf Company is considered a sporting and athletic goods manufacturer (NAICS 33992), which corresponds more closely to Leisure and Education in Figure 9 (or class 28 toys and sporting goods). Thus, rapid growth in class 35 filings may stem, at least partially, from “goods” providers extending their trademark rights to cover both brick and mortar and online retail activity. Likewise, “service” providers may seek to protect marks when used on goods or other services tangential or even outside their principal business activity. By and large, a more robust method for linking trademarks to industry is needed to distinguish among the numerous potential drivers of trademark filing growth.

4 Which types of trademarks account for the growth in trademark filings?

The vast majority of applicants file to register a pure word or “standard character” mark with the USPTO.¹⁸ This predilection for standard character marks likely reflects the greater flexibility and potentially broader protection registration of such marks affords compared to other forms.¹⁹ Figures 8 and 9 indicate that applicant preference for pure word marks intensified during the 1990s and has abated only marginally in the past decade. Logos containing both designs and characters account for most of the growth in non-pure word marks applications. Design only and stylized character marks have declined as a proportion of incoming applications, and filings to register sound, smell, and other non-visual marks are extremely rare.²⁰

¹⁶ U.S. Reg. No. 2325223.

¹⁷ U.S. Reg. No. 2687013.

¹⁸ See *In re Viterra*, 671 F.3d 1358, 1363 (Fed. Cir. 2012); 37 C.F.R. § 2.52(a). A standard character mark consists only of non-stylized text, without any design element, and an applicant seeking to register a standard character mark does not claim protection for the characters in any particular font, stylization, size, or color.

¹⁹ The owner of a standard character mark may change the mark’s display at any time because rights reside in the wording itself and not in any particular form. See Case Files § 4.1.1.

²⁰ Applicants may claim three-dimensional design elements of proposed marks, such as recognizable product packaging, or “trade dress,” that distinctively identify the product’s source. See Case Files § 4.1.1.

5 How have trademark filings by non-residents evolved?

Of the 5.0 million applications filed with the USPTO between 1985 and 2011, only 14.6 percent can be attributed to non-U.S. residents.²¹ Figures 10 and 11 shows resident and non-resident applications based on the first-named owner's country of residency. Applications to register U.S. owned marks consistently comprise the vast majority of new filings. Foreign demand did appear more resilient following the dot-com boom. Non-resident applications recovered faster and exhibited stronger growth than resident filings through 2010. Overall, however, resident and non-resident applications have grown at roughly the same pace between 1985 and 2011.

There is some variation in the distribution of non-resident applications over this time period (see Figure 12). As a proportion of total non-resident applications, Canadian filings peak in the mid-1990s, potentially in response to increased access to the U.S. economy following implementation of the North American Free Trade Agreement in 1994. While filings have since slowed, Canadian residents remain the largest source of non-resident applications for U.S. trademark registration. Non-resident filings from Germany, the United Kingdom, Japan, France, and Italy also show signs of relative decline though increasing in annual volumes overall. In contrast, China (including Hong Kong), Mexico, and South Korea accounted for growing shares of non-resident applications. In 2011, Chinese residents were the fourth largest source of foreign applications for U.S. trademark registration.

The distribution of residents and non-residents applications across different mark types was roughly the same until the mid-1990s. Thereafter, U.S. applicants show stronger relative demand for pure word marks while foreign applicant preferences have been largely unchanged. Non-residents file a greater share of applications for design and character logos and stylized text marks, which together accounted for 34.8 percent of non-resident filings in 2011 compared to 22.1 percent of resident applications. It is unclear why foreign applicants have not adopted as strong a preference for pure word marks as U.S. residents. Language differences may render foreign applications more inclined to claim symbolic elements over standard characters. Some selection bias is also likely given that use in U.S. commerce is required to maintain trademark rights.

Applications to register trade dress are not explicitly identified in these data and would be captured in design and character or design only categories in Figure 9.

²¹ Applicant residency was established based on the first-named applicant's address. For applications with no owner address data recorded, the first-named applicant's nationality was used to proxy origin. Applications with neither address nor nationality data coverage were omitted. Basing residency on nationality yielded comparable results.

There is little difference in the distribution of resident and non-resident applications across Nice classes. The individual classes, which we described in Section 2, account for roughly the same share of both foreign and domestic applications between 1985 and 2011. The largest deviation is in class 35, which comprises 9.3 percent of domestic total filings during the period compared to 5.1 percent of foreign applications. A few classes stand out for relative growth in non-resident applications but relative decline in resident filings (or vice versa). For example, class 9 (electrical and scientific apparatus) has declined as a proportion of domestic applications but increased as a proportion of foreign filings. Conversely, class 25 (clothing) shows signs of relative decline in non-resident filings while holding stable as a proportion of resident applications.

6 How has the number of classes in trademark applications evolved?

The majority of applicants file for U.S. trademark registration in only one class. This has not changed over time (see Figure 13). While the mean number of classes specified per filing has increased, this is largely the result of lengthening of the tail of the distribution.

Presumably, the use requirement preempts applicants from filing in multiple classes. This does not imply that entities use marks solely on the goods or services within a single class. Rather, entities appear to extend trademark rights in a piecemeal fashion as use of the mark on new goods and services evolves. Once an entity has registered a mark in one class, the registrant cannot add new goods or services (whether in the same or different Nice classes) to the existing registration. To expand trademark rights into other product markets or sectors, the entity must file a new application with the USPTO to register the same mark for use on the additional goods or services. Thus, the distinction between single and multiple class registrations may not be relevant for an individual mark. An entity can achieve the same protection for a trademark through multiple single class registrations or one multiple class registration. Figure 12 indicates that entities predominantly opt to file single class registrations or are limited to single class registrations until mark use broadens. The fee structure further incentivizes this behavior as the USPTO applies filing, maintenance, and renewal fees on a per-class basis.²²

²² As of 20 March 2013, the USPTO trademark fee structure includes an application fee of \$325 per class for filing an electronic application, \$275 per class for electronic applications with specific requirements for maintaining electronic correspondence through prosecution, and \$375 per class for paper applications. Presently, almost all applications are filed electronically. The USPTO applies a \$100 per class fee for filing a

7 Renewal rate

Once registered, a U.S. trademark may be renewed indefinitely, so long as the mark remains in use for the listed goods and services. In the sixth year after registration, the registrant must file a declaration of continued use with the USPTO to avoid cancellation of the mark.²³ Since 1989, the mark owner must also file maintenance documents as well as a renewal application every ten years to keep the registration active.²⁴ Prior to 1989, registrations were maintained and renewed every twenty years from the date of issuance.²⁵ Figure 14 presents maintenance and renewal rates—defined as that share of registrations at hazard that year of cancellation or expiration which is maintained or renewed—from 1991 to 2010 (registration cohorts 1985 to 2005).²⁶ The figure includes tenth-year renewal rates starting in 2000 for registrations issued in and after 1990, and twentieth-year renewal rates through 2008 for registrations issued prior to 1989.²⁷

Given the nominal cost of maintaining and renewing a U.S. trademark registration, we presume that the use requirement is the primary driver of maintenance/renewal decisions. Roughly half of all U.S. trademark registrations are cancelled in the sixth year for failure to establish continued use, suggesting that the commercially useful life of most new marks is of limited duration. Sixth-year maintenance rates have fluctuated between 44 and 51 percent since 1985 despite the rapid growth in registrations (see Figure 1). The slight peak in 1999 suggests increased likelihood of maintenance during the dot-com boom. Tenth-year and renewal rates also appear fairly stable, holding near at 65 to 67 percent over the past decade, suggesting that growing trademark demand has had little impact on renewal decisions.

statement of use affidavit and \$400 per class for filing a renewal application. For the current fee schedule, see <http://www.uspto.gov/web/offices/ac/qs/ope/fee092611.htm#tm>.

²³ 15 U.S.C. § 1058(a). With any affidavit or declaration filing, the owner must provide specimen(s) depicting use of the mark for the listed goods and services and pay the prescribed maintenance fees per class. If the affidavit or declaration is not filed within the statutory time limit or does not meet statutory requirements, the registration is treated as cancelled. *See* Case Files § 4.2.

²⁴ 15 U.S.C. § 1059(a). If the renewal application is not filed within the statutory time limit or does not meet statutory requirements, the registration expires as of the end of its term. *See* Case Files § 4.2.

²⁵ Registrations issued or renewed prior to November 16, 1989 were permitted to retain the twenty-year term until the first renewal event following the change. Thereafter, the renewal term was limited to ten years. 15 U.S.C. § 1059(a).

²⁶ Figure 14 excludes 2011 because maintenance/renewal rates were not fully observable as of the file generation date due to recordation delay. USPTO records are not updated to reflect cancellation/expiration until after the expiration of the six-month grace prior to filing maintenance documents and/or the renewal application. Note that recordation of a cancellation/expiration may lag the effective cancellation/expiration date by more than one year.

²⁷ For the sake of consistency, we omit ten-year renewal rates for the small number of applications registered in late 1989 after the shift to ten-year terms and twenty-year renewal rates for registrations issued in 1989 prior to the change.

Figures

Figure 1

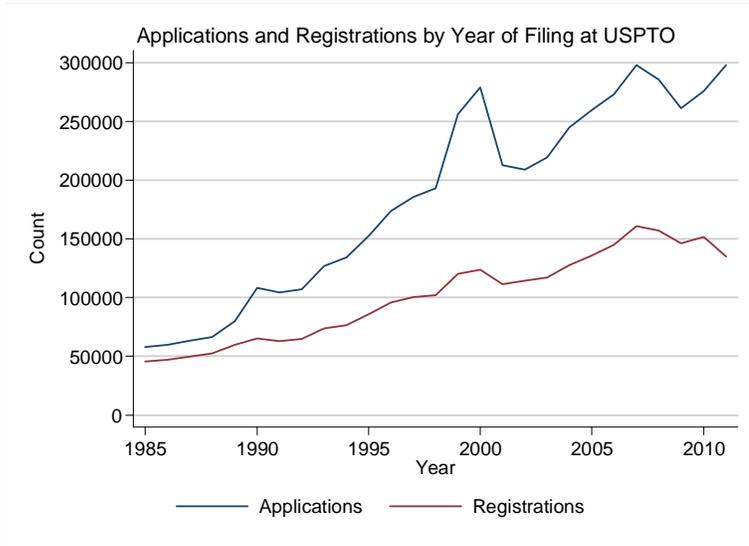


Figure 2

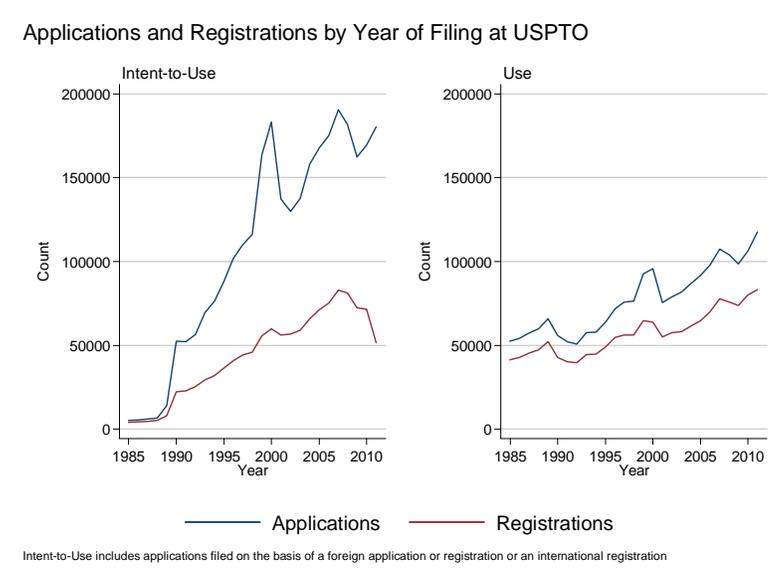


Figure 3

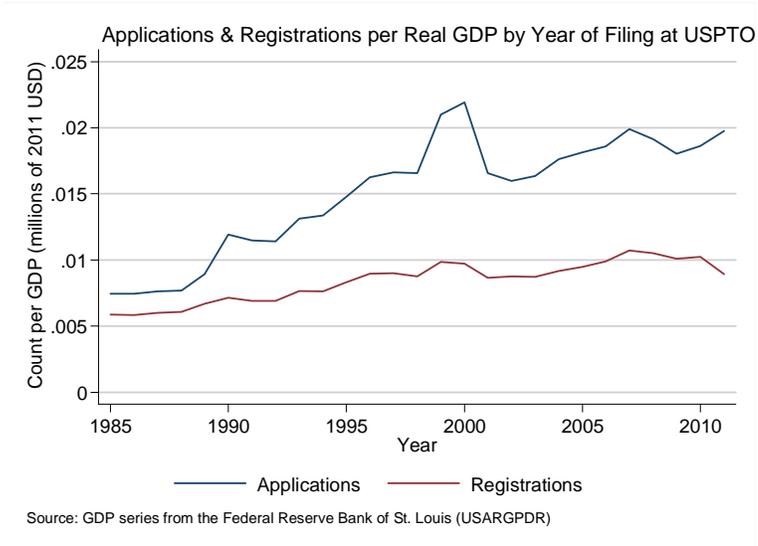


Figure 4

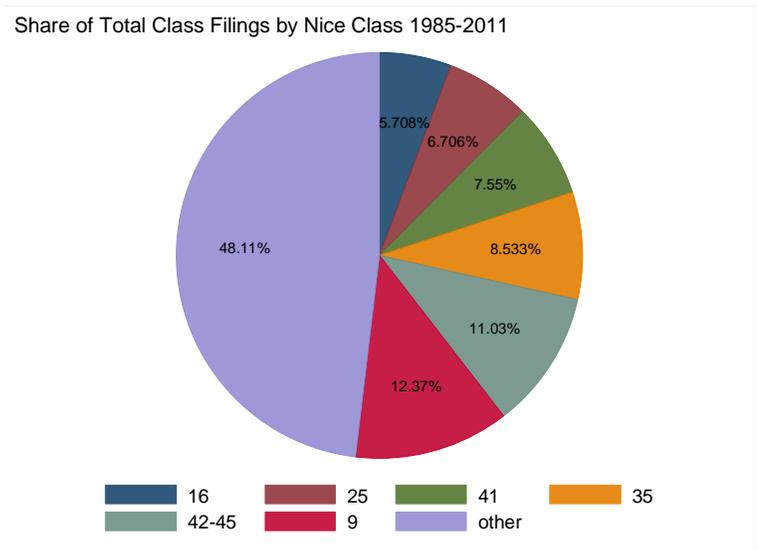


Figure 5

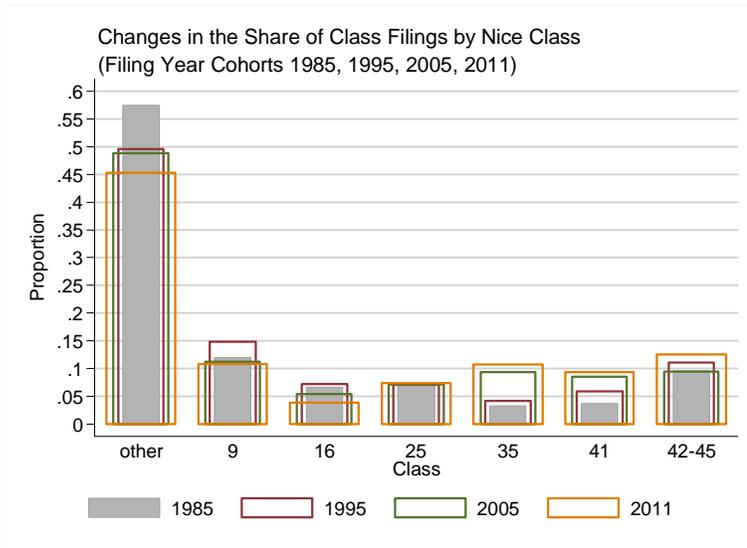


Figure 6

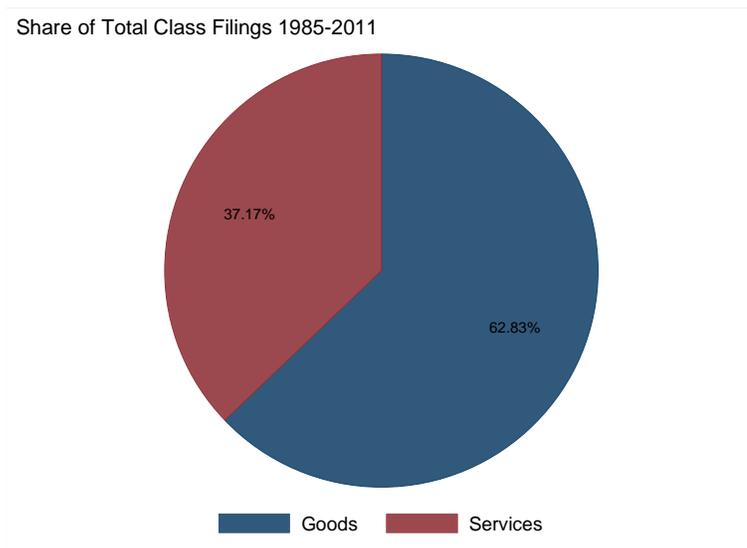


Figure 7

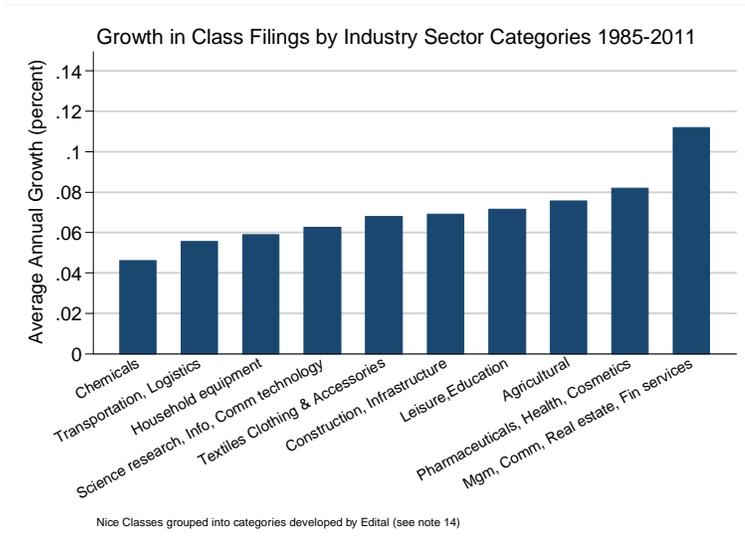


Figure 8

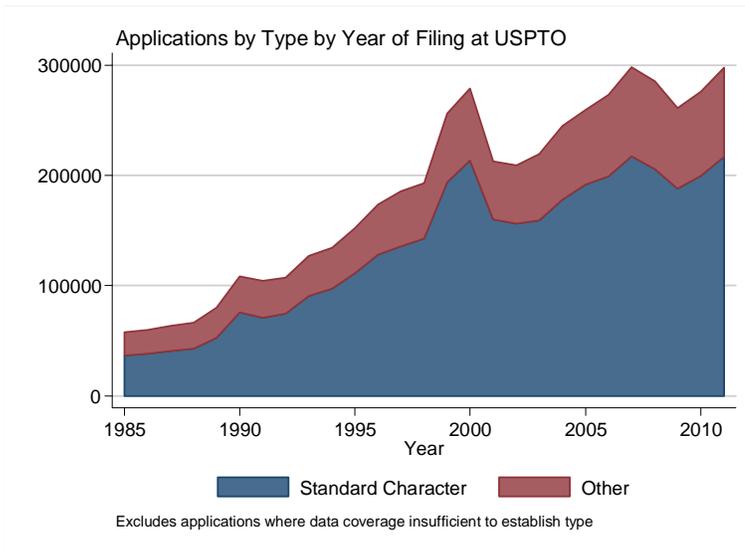


Figure 9

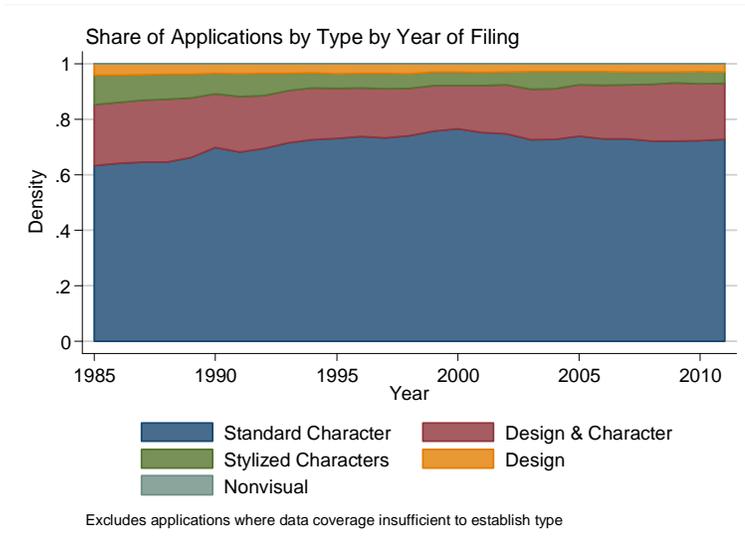


Figure 10

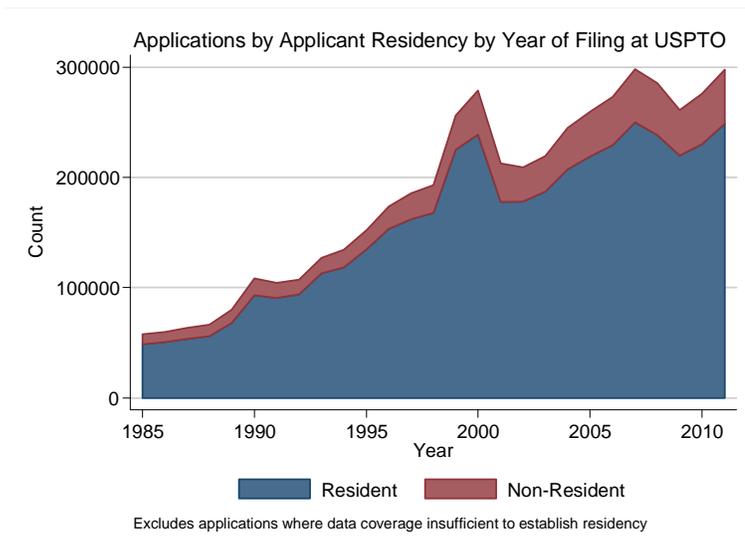


Figure 11

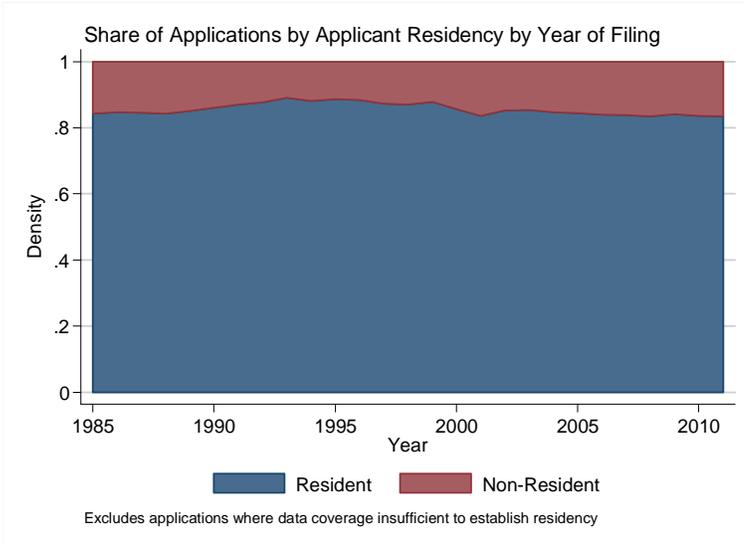


Figure 12

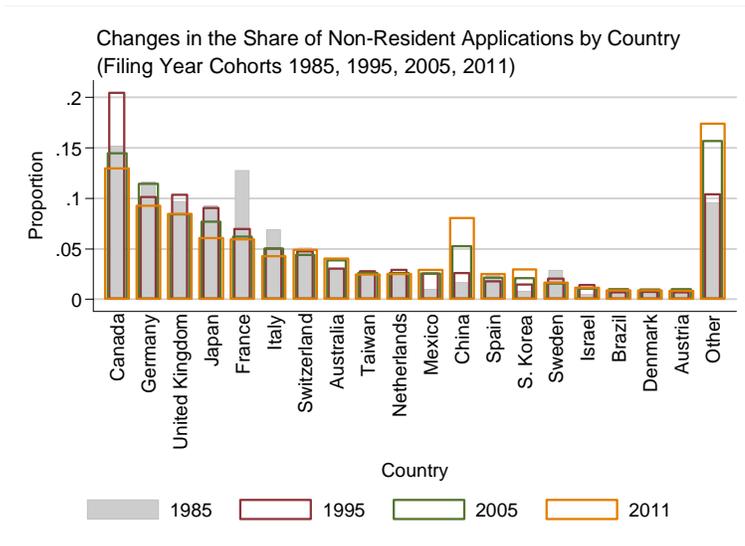


Figure 13

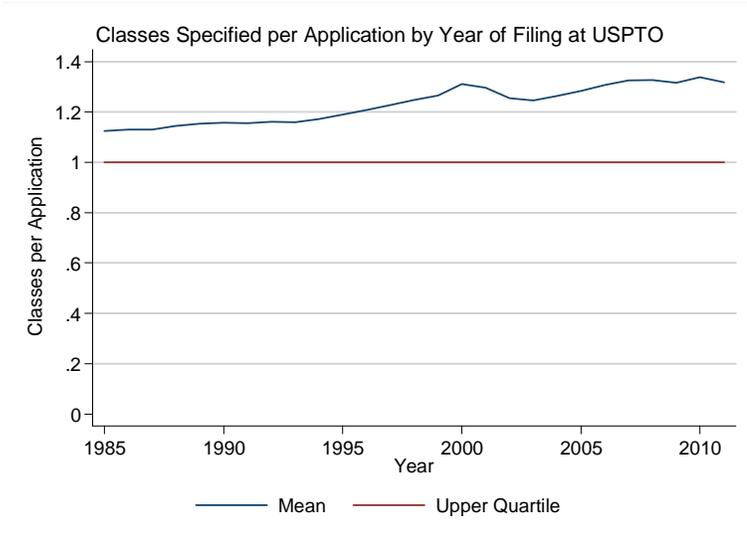
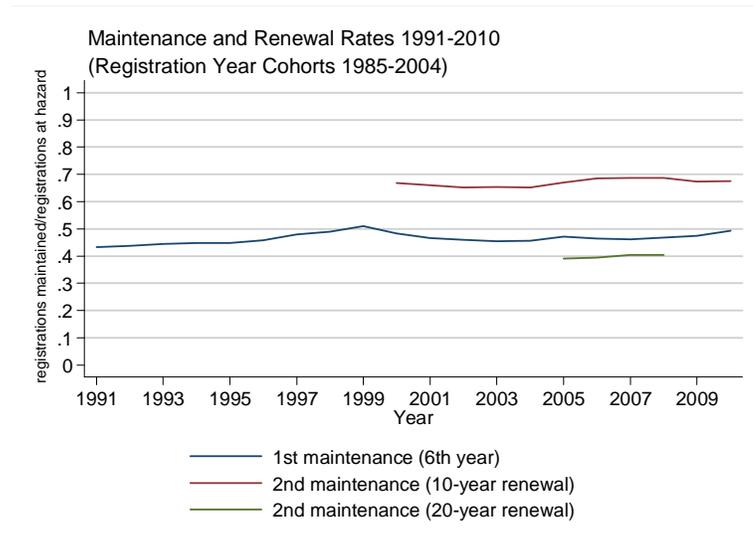


Figure 14



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