

Michael Masnick Michael Ho



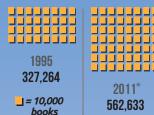






BOOKS

MORE BOOKS ARE BEING PUBLISHED THAN EVER BEFORE:



Books Published by Year

*2010 DATA FOR

GERMANY & ITALY

GERMANY, FRANCE, UK, ITALY, RUSSIA, SPAIN

EBOOK MARKETS ARE GROWING:



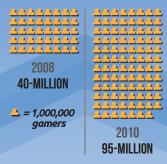
Total European Digital Book Market

eBook Market Growth by Country



GAMES

GAMING IS ON THE RISE ACROSS **EUROPE:**

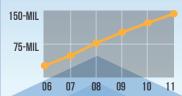


Total European Gaming Population

of adults have played a video game in the last 6 months (2010)

Gaming isn't just for the young. Almost 30% of 30 to 49-year-olds are gamers.

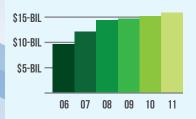
Game Consoles In Europe, 2006-11



REVENUES TREND UPWARDS IN ALL STUDIED MARKETS:

Total Video Game Industry Revenues

GERMANY, FRANCE, UK, ITALY, RUSSIA, SPAIN



MUSIC

MORE LEGAL SERVICES APPEAR EVERY YEAR:



Music Services

GERMANY, FRANCE, UK, ITALY, RUSSIA, SPAIN

LIVE MUSIC MARKETS **ARE GROWING:**

Live Revenues by Country

2013 PROJECTION & Y.O.Y. CHANGE FROM 2007



Live Music Revenues with 2013 Projection



VIDEO

A RECORD YEAR **FOR THE EUROPEAN FILM INDUSTRY:**

European box office gross, 2011

▲ 0.7% SINCE 2010

EU Feature films produced in 2011

Feature Films Produced in All Studied Markets



Films by Country

07

09

N8

06

05

2009 TOTAL & Y.O.Y. CHANGE FROM 2005



ITALY - 131 **A** 34%

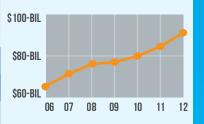
RUSSIA — 253 **A** 57%

SPAIN – 186 \triangle 31%

TV MARKETS **ARE GROWING:**

Television Revenues in All Studied Markets

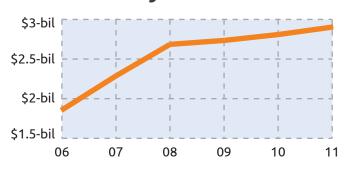
GERMANY, FRANCE, UK, ITALY, RUSSIA, SPAIN





Video Games

Game Industry Revenues Source: PwC



- » Social gaming upstart Wooga has already hit 45-million monthly users since it launched in 2009
- » In 2009, the two fastest-growing IT companies in Germany were video game companies

Music

Authorized Online Music Services



2011 Digital Music Revenues €247-million ▲ 21%

Source: BVMI

Video

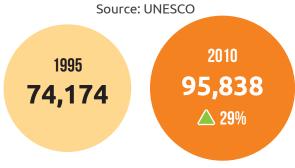
FIlms Produced Source: UNESCO



2012 Box Office Gross €900-million ▲ 4.1%

Books

Number of Books Published



2010 Book Industry Revenues

\$6.3-billion ▲ 5% OVER 2008

According to a Börsenverein study,2-million ebooks were sold to 540,000 ebook consumers in 2010.



Music

Digital Music Revenues



Live Music Revenues



Video

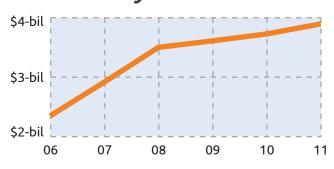
Television Revenues Source: IHS



2011 Box Office Record €1.4-billion ▲ 27%

Video Games

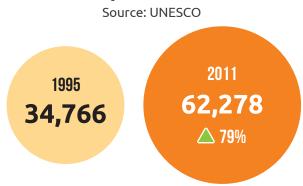
Game Industry Revenues Source: PwC



» France has had tax breaks for video game developers since 2007, long before most European countries

Books

Number of Books Published



- » France was the first EU nation to reduce VAT rates on eBooks to be on par with printed books
- The market share of eBooks in France grew from just 0.2% in 2010 to nearly 2% in 2011
- » Amidst economic turmoil, publishing revenues held steady from 2008-10

United Kingdom

Video

Box Office Gross

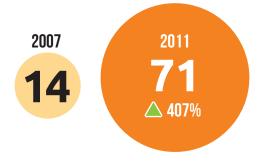


Television Revenues Source: IHS



Music

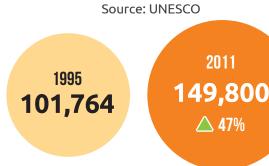
Authorized Online Music Services



» UK digital music revenues surpassed physical revenues, leading to music revenue growth of 2.7% from 2011-12

Books

Number of Books Published



» eBook market share grew from just2-3% in 2010 to 7% in 2011

Video Games

Game Industry Revenues



- » Video games have the highest growth rate of all creative industries in the UK
- » Video games account for a third of all creative industry exports
- » In 2009, video game sales exceeded consumer spending on films

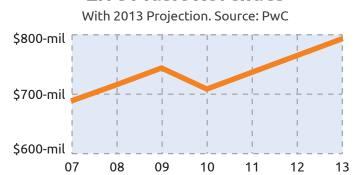


Music

Digital Music Revenues



Live Music Revenues



Video

Television Revenues Source: IHS



Films Produced in 2009

131 A 27% OVER 2005

Video Games

Game Industry Revenues Source: PwC



» The Italian government has proposed tax breaks for video game developers, though EU regulations could interfere

Books

Number of Books Published

1995 34,470 2010 57,558 △ 67%

- The market share of eBooks in Italy grew from less than 0.1% in 2010 to about 1% in 2011
- » Amidst economic turmoil, publishing revenues held steady from 2008-10

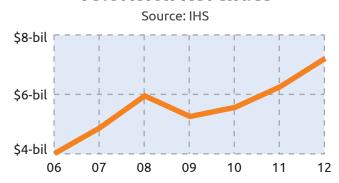


Video

Films Produced

2005 161 2005 253 \$\triangle\$ 57%

Television Revenues



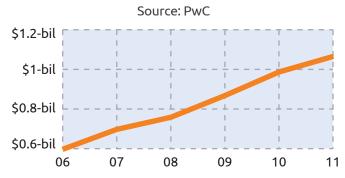
Music

Live Music Revenues

» Digital music revenues imploded from 2010 to 2011, falling by 41% to \$43-mil.

Video Games

Game Industry Revenues



» Electronic Arts predicts the Russian game market will hit \$1.5-bil by 2015

Books

Number of Books Published

2011 1995 33,623 266%

eBook Readers Sold

Source: India & Russia Report/Marina Rozhkova





Music

Live Music Revenues

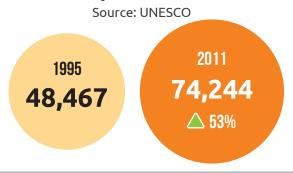
\$700-mil \$500-mil \$500-mil \$07 08 09 10 11 12 13

Authorized Online Music Services



Books

Number of Books Published



» Spain's book market lost some ground during the global recession, falling from \$2.3-billion in 2008 to \$2-billion in 2010

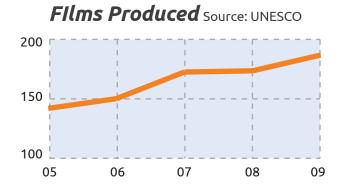
Video Games

Game Industry Revenues Source: PwC



» In 2010, 52% of 16-29 year olds and 27% of 30-49 year olds played video games (Source: ISFE/GameVision)

Video



» The 2011 Spanish film *No Habrá Paz Para Los Malvados* found success without content windows: it was released simultaneously in theaters, on DVD, on pay-TV, and online.

Introduction

At the beginning of 2012, we released our report, "The Sky is Rising," which looked at the state of the global entertainment industry, focusing on four key creative sectors: music, books, video and video games. What we found, in going through a significant amount of data, was that contrary to the stories of doom and gloom concerning content, we are actually living in a true renaissance period of abundance, with each industry growing in terms of revenue — but even more impressively in terms of content output, often expanding at unheard of rates.

We looked at traditional metrics as well as some new business models that were either catching on, or which were at least drawing significant interest. What we found was a world full of opportunity and growth. At the same time, we noted that there were significant challenges for content creators: mainly in learning to navigate this new world where (1) the process for becoming successful was not as clear on a map — even if there were many more opportunities to succeed and (2) that there was much greater competition, both within the specific field they were in, but also across other fields of entertainment.

In our follow-up report, which you're now reading, we wanted to focus in on a few additional countries to get a better understanding of whether or not the same patterns are true within specific economies. The concern, of course, is that within the larger aggregate data, it's possible that significant differences in certain countries could skew the overall data. For this report, we chose to focus on these six major economies: Germany, France, the UK, Italy, Russia and Spain.

What we found was, as expected, not all economies are the same — and some of those economies are in serious turmoil — but that the overall trend lines are similar in direction. Even as the growth may not have been as strong or as clear in all of these countries, time and time again we found evidence that entertainment industry output and options have been expanding over the last decade. This wasn't true in every case in every country — but even the small areas or periods of struggle appear to have been greatly outweighed when looking at the overall economy.

That the same basic patterns remain tells quite a fascinating story: one that suggests that "content creation will always find a way." There are, certainly, significant challenges that content creators and related companies face in these countries — but over and over again, the evidence showed greater and greater creativity, even in the face of these challenges.

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1 MUSIC

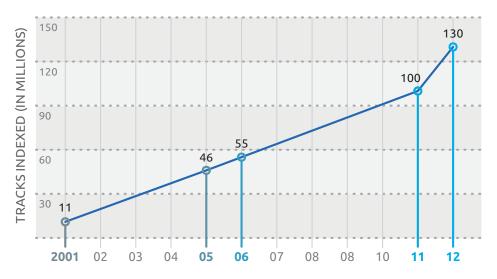
The music industry has been portrayed as the harbinger of doom when it comes to the creative industries. Digital file sharing caught the recording industry by surprise and disrupted the traditional economics of distributing music. Certainly, there are metrics that show a decline in sales for music on physical media, but the larger picture doesn't suggest that music is dying or that the industry surrounding music is waning. The business landscape has definitely changed significantly for musicians, and the way forward should focus on adapting to new digital technologies and business models — not looking to preserve outdated distribution methods.

► MUSIC PRODUCTION

The world is producing music at a greater rate than ever before. Unfortunately, it's difficult to aggregate exact numbers for how much music is produced every year, but several estimates point to undeniable growth. At the turn of the millenium, the US produced an estimated 27,000 albums per year. By 2009, roughly 100,000 digital albums were released in the US, more than tripling American music production in about a decade with about 1 million tracks recorded per year now.

Globally, the media metadata service Gracenote has indexed over 130 million music tracks, and over the years, it has been adding about 10-15 million songs to its database in a remarkably consistent manner, year after year. This rate of indexing is not exactly equivalent to the rate of music production, however, as Gracenote's indexing includes older

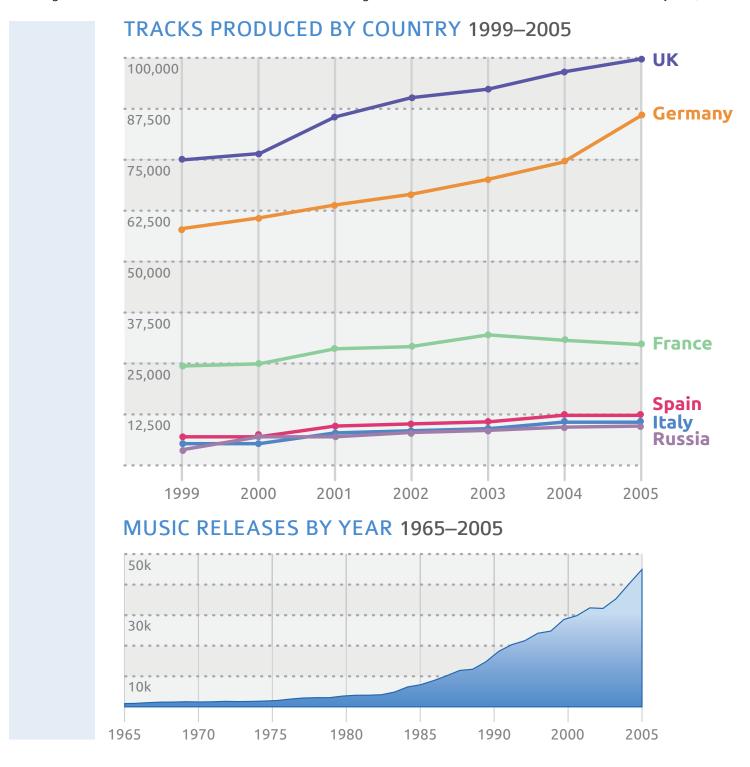
TRACKS INDEXED BY GRACENOTE 2001–12



music as well as newly-produced works. Still, Gracenote's indexing rate is a reasonable proxy for music production since Gracenote admits that its metadata is biased towards commercially popular music and is likely to be gathered on newer music rather than obscure, decadesold music from around the world. Gracenote's mission is not to create an exhaustive archive of recorded music, but its database still points to an impressive amount of music creation.

Gracenote's database is, unfortunately, a proprietary product that doesn't publish more specific data on a per country basis. (Another company with music metadata, Last.fm, also stopped allowing users access to its complete database in 2007.) However, other music collections, such as MusicBrainz, are completely open about music metadata, but cur-

rently have a far less complete index — with databases that are less than half the size of Gracenote's collection. Still, MusicBrainz data shows that its geographic distribution of music is generally consistent with international music sales rankings. The US produced about 26% of the music in the MusicBrainz database. The UK comes in second with 13%. Germany produced about 10%; France has 4%, and Italy, Spain and Russia were each responsible for 1-2% of the MusicBrainz collection. Another music database, Discogs, has over 30 million tracks in its database and shows a similar geographic distribution to MusicBrainz (US: 24%; UK: 20%; DE: 12%, FR: 5%; IT: 5%; SP: 2%; RU: 1%). Considering that the overall MusicBrainz database has also grown at a consistent rate over the last several years, wild



fluctuations of annual music production would be unexpected. MusicBrainz's music production data shows that the rate of music production may be accelerating slightly recently, but at the very least, the general trend shows that music production is increasing as time goes by.

One important note about these music databases is that they cover mostly traditional, commercial music — produced by major recording labels and professional independent artists. But a vast unaccounted-for sea of music is also being produced by amateur musicians who often record their performances on YouTube (for a worldwide audience). Just

It would be easy and simpler to exclude all amateur musicians from official music production figures, but doing so would also grossly underestimate the potential of the music industry and undercount the diversity of the field of music.

as the non-traditional book publishing market has seen exponential growth while the traditional book market grows linearly, there may be similar growth in the production of non-traditional recorded music, performed by amateurs/hobbyists — or even computers. (Software for computer-generated music could create music far faster than any human, and companies/researchers are developing projects like Darwin Tunes, which has generated thousands of musical variations, and Voxonic which can automatically translate music into thousands of different languages.) Just counting amateur musicians, a cursory search for "cover songs" on YouTube returns tens of thousands of results every month — and millions of amateur cover song videos have been uploaded over the years.

It would be easy and simpler to exclude all amateur musicians from official music production figures, but doing so would also grossly underestimate the potential of the music industry and undercount the diversity of the field of music. Additionally, every professional musician starts somewhere, and several reality shows — Britain's Got Talent, Pop Idol (UK), Deutschland sucht den Superstar (Germany), Nouvelle Star (France), Factor X (Spain), Amici di Maria De Filippi (Italy), Narodniy Artist (Russia) — all promote the idea that amateur singers from nearly all walks of life can become pop stars with international appeal. More and more yet-to-be-famous

singers are getting publicity via non-traditional media outlets, so completely discounting the increasing pool of talent (no matter how untalented they may be in the "deep end") would miss out on where the music industry is going and how it may spread in the future.

Another fascinating point about music production is that not only is the number of songs growing consistently but the categories of music are also expanding — creating new genres of music that previously didn't exist. An analysis of user-tagged music based on Last.fm data shows an evolution of music types that is gradually expanding and branch-

ing out as musical tastes change over time. This diversity of music shows no evidence that a monoculture of music will ever re-emerge, and the fragmentation of pop music into small niche sub-genres like 'gangsta rap' or 'emo punk' may not have as many fans as 1960's rock — but the creation of these new musical species certainly doesn't point to an extinction of music. A thriving ecosystem of music arguably needs to keep mutating and spawning new categories of sound, and plentiful evidence exists that music is constantly evolving and creating culture in ways we may not be able to predict.

Few legacy record publishers may welcome a complicated music audience with almost as many sub-genres as there are fans because it's simpler to market music with broader appeal. But the overall market is better off with a wider selection of musical options, and there's more opportunity for more musicians than ever before. Over a third of You-Tube's audience watches music videos, and billions of music-related videos are seen globally every month. That said, the music industry is still dominated by blockbuster songs — with roughly 1% of all digital tracks representing 80% of digital sales revenues and a long tail of digital music in which 80% of all albums are purchased less than 100 times. Obviously, not every song can be a commercial success, but the music industry has more chances to monetize more songs — and new business models and marketing strategies could take advantage of this abundance of music.

MUSIC INDUSTRY REVENUES

While the overall music industry has grown, the sales of CDs and other physical media for recorded music have slowed considerably over the last several years — though the decline may be slowing down. The recorded music industry is transitioning to selling more digital music (rather than physical media), and the revenues from digital songs are starting to match up to the revenues from physical media sales. (We are using the term digital music to refer to recorded music in electronic formats, not to the products of the music publishing sector.) In 2004, the US music industry was just starting to collect significant revenues (just \$190 million) from digital music services. By 2011, US digital music revenues were nearly \$3.5 billion according to the RIAA. Globally, the digital recorded music industry is expected to grow 15% annually – from nearly \$10 billion in 2011, reaching \$22.5 billion by 2017.

In the UK, revenue from sales of recordings in digital formats has recently surpassed non-digital sales for the first time. BPI Chief Executive Geoff Taylor noted "This is a significant milestone in the evolution of the music business. UK record labels have embraced digital to their core, supporting innovation and licensing more new online and mobile

services than any other country." Additionally, UK songwriters are earning more from digital royalties, up 3.2% in 2011. And digital albums and streaming music have been growing solidly - with income from streaming music platforms nearly doubling at the start of 2012.

Germany's music association, Bundesverband Musikindustrie (BVMI), also reports that its country's digital music sales are growing at a healthy rate, up over 21% in 2011 to 247 million euros. Similar to the music market in the UK (as well as the US and France), Germans are also buying digital albums along with their individual



UK digital music revenues recently surpassed those of physical media, producing year-on-year growth.

MUSIC REVENUES, Q1 2011 – Q1 2012 **2.7%**

DIGITAL MUSIC REVENUES

Country	2010	2011	
France	\$215m	\$275m	▲ 27%
Italy	\$42m	\$49m	▲ 16%
Russia	\$73m	\$43m	▼ 41%
Spain	\$44m	\$44m	-

music tracks — so the fears of albums going extinct appears to have been unfounded.

According to the IFPI, French digital music revenues grew about 28%, from \$215 million in 2010 to \$275 million in 2011. Italy's digital music went from \$42 million to \$49 million over the same period, up about 16%. However, Spain had virtually no digital growth, with IFPI reporting digital revenues of about \$44 million for 2010-2011. Lastly, Russia's digital sales revenues imploded (even though there is still some optimism about mobile music services), with sales dropping 41% from \$73 million in 2010 to \$43 million last year. Yet despite this Russian outlier, Apple is planning to launch a Rus-

sian iTunes store in the next few months. Also, the French streaming music service, Deezer, recently launched in Russia. Deezer CEO Axel Dauchez expects triple digit growth in Russia's online music market, projecting it to double each year for the next five years. So clearly, consumer demand for music in Russia still exists, but music services need to develop more ways to appeal to Russian consumers with subscription music services and/or other offerings that are free to the end user (such as ad-based music).

Some industry speculation to explain the drop in Russian digital music revenues points a finger at piracy and file sharing among social networking services, but that scenario doesn't quite explain why piracy is such a detriment to Russia's digital music revenues so suddenly. Other explanations point to the decline in ringtone sales — which are usually counted as digital music revenue — and the tremendous popularity of smartphone music that may have taken a significant bite out of the ringtone market. Interestingly, the number of legal digital music services in Russia has not grown much over the last five years, remaining at about a dozen services while other nations have doubled or tripled their legal music services over the same period. So there may have been an investment lag in Russia's digital music services — due to music licensing being notoriously complex and prone to slowing down the process of digital music developments. In any case, there is no evidence that Russians are listening to less music or that the demand for digital music is faltering, so the significant drop in Russia's digital music revenues may not have a simple explanation.

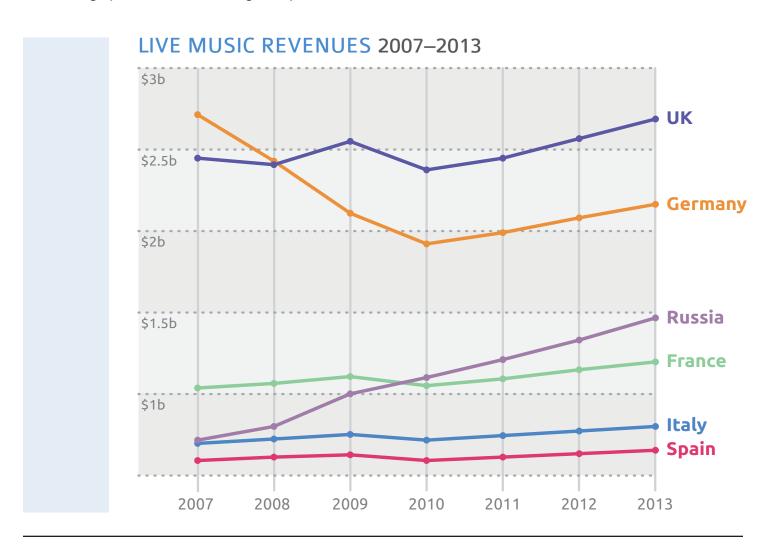
The recent digital music revenues in Spain and Russia could be a temporary business cycle phenomenon, and conclusions based on these numbers could be misleading. Certainly, it's useful to know the revenues from digital music services, but these numbers don't necessarily point to a course of action. In response to the 2010-2011 digital revenues in Spain, Rob Wells (president of global digital business at Universal Music Group) recently noted, "Spain, which should be the powerhouse of repertoire for Latin America and the U.S. Latin market, is effectively a dead market." That statement clearly ignores a larger picture for the music industry by focusing solely on one source of revenue. Spain and Russia both have thriving cultures that create plenty of music, and there is a value to that music that cannot be summed up just by looking at the sales of recorded music, when the economic impact is much broader.

Live music revenues have been a sector of recent growth with predictions that live performances and concert ticket sales will be a more reliable stream of income for some musicians since the experience of a live performance is truly

scarce service that can't be duplicated (and bootleg recordings are not the same as a live concert). Revenue data on a country-by-country basis is somewhat inconsistently measured due to the widely distributed organizations that host local music events, but several statistics do exist and point to a healthy and resilient live music market.

Globally, Pollstar reports that the top 50 music tours for 2009 brought in a record \$3.34 billion in concert ticket revenues. Since then, the top 50 tours earned \$2.93 billion in 2010 and \$3.07 billion in 2011 — a drop off from 2009's record-setting sales, but still very respectable considering the pervasive economic conditions and the fact that the total market is much larger than just the top 50 bands. In North America, the top 100 touring musical groups earned just over \$730 million in 2005, rising to \$2.5 billion in 2009 and stabilizing at about \$2.25 billion in concert sales revenues for the last few years — while the total US market tripled in size from \$1.5 billion to \$4.6 billion from 1999 to 2009. In Germany, Billboard and two leading concert promoters (DEAG & MLK) reported that live music revenues hit a record high in 2007 at about \$3.6 billion, falling to under \$3 billion in 2010 and rebounding in 2011 with \$3.5 billion in ticket sales.

Using different data, PricewaterhouseCoopers reported that the concert and music festival market in Germany had about \$2.7 billion in revenues in 2007, falling to about \$2 billion for the last couple years. Based on other PwC data, live music revenues in the UK quadrupled from \$600 million in 2000 to over \$2.4 billion in both 2010 and 2011, with a record high year in 2009 collecting nearly \$2.6 billion in ticket sales. Russia's concert and music festival revenues



were over \$700 million in 2007, rising to over \$1.2 billion last year. France's live music revenues remained roughly constant over the same period. France has had a little over \$1 billion in live music revenues from 2007 to 2011. Italy went from under \$700 million in live music revenues in 2007 to about \$740 million in 2011, and Spain went from under \$600 million to over \$610 million in the same period of time.

Going beyond the sales of recorded music and live music, another major source of revenue for musicians has been and remains various Collective Rights Organizations (CROs) or Performing Rights Organizations (PROs) which collect money for various activities around music, including mechanical licensing, performance rights, private copying levies (common in Europe, though not in the US) and more. From a high level, the overall trend for over a decade has been and continues to be growth in this sector of the music industry. The International Confederation of Societies of Authors and Composers (CISAC), which is made up of most of the top CROs around the globe, has shown continued growth in the money that it is collecting and distributing to artists. Its latest annual report notes that there has been a "steady increase in the societies' collections over the last 7 years and a doubling in global collections in 15 years (from €3.612 billion in 1995 to €7.545 billion in 2010)." From CISAC's data, other than a very brief dip in 2002 and 2003, the growth rate has been consistently positive. As the most recent year for which CISAC has published data, 2010 represented CISAC's best year ever in terms of collections.

CISAC's data shows that these increases were not just limited to one part of the business either. Within the realm of recorded works, they saw an increase of 2.7% globally from 2009 to 2010, even as recorded music sales have seen difficulties. Other parts of the business are growing even faster. Private copying revenues grew by 20% in 2010 (compared to 2009) — and CISAC notes that much of that is due to growth in Western Europe. Additionally, public performance royalties grew 7.5% in 2010, and this number is important, given that the performance royalties represent 73% of the revenue CISAC distributes.



GEMA Distribution Revenue:

1998: 2010:

€645.5-MIL. €735.9-MIL.



SACEM Collections Revenue:

2008: 2011

€756-MIL. €820.5-MIL.

Zeroing in on Europe, we tend to see significant and sustained growth as well. In Germany, GEMA has shown a trend of gradual growth in distributions from €645.5m in 1998 to €735.9m in 2010. While there was a brief dip in 2007/08, the growth there has otherwise remained robust.

In France, SACEM doesn't publish detailed information on its distributions, or provide significant historical data, unfortunately. However, from what information it does provide, we see a similar story looking at overall collections (a larger number than distributions, obviously). In 2008, it collected €756m. By 2011, that number was up to €820.5m. Not surprisingly, SACEM sees the greatest growth from the internet, which grew 178% from 2010 to 2011. Collections for the internet/multimedia sector still make up a small portion of the total (€18.3m), but it's an area that is growing quickly.

Across the channel in the UK, we see a similar story. PRS for Music reports significant growth in collections and distributions from 2005-2010, with the only a slight dip coming from 2009 to 2010. Going back to 2005, PRS distributed £271.3m for performance rights and £212.4m in mechanical royalties for a total of £483m. In 2010, the numbers were £399.1m for performance rights and another £166.8m in mechanicals, for a total of £565.9m distributed. PRS covers collections for songwriters, composers and publishers. There's a separate organization, PPL, that handles collections for performers. It's also seen notable growth, going from distributing £55.6m in 2000 to £130.8m in 2011. Matching the years discussed above for PRS for Music, PPL distributed £75.4m in 2005 and £124.1m in 2010. So combined over the same period, distributions in the UK went from £558.4m in 2005 to £690m in 2010.

Moving on to Spain, SGAE saw distributions rise from €295m in 2004 up to €340.1m in 2011. It's worth noting that in the summer of 2011, SGAE's offices were raided, and accusations made by law enforcement stated that senior SGAE officials may have diverted millions of euros from licensing fees (meant for musicians) into personal accounts.

In Italy, the local collection society, SIAE, is not entirely forthcoming with its numbers. Compiling what little data is released, its distributions continued to increase from 2007 until 2009, from €782m to €821m, when its distributions hit a peak. In 2010 and 2011, distributions dropped off, such that SIAE's 2011 distributions, at €787m, were on par with those in 2007.



PRS Music Collections Revenue:

2005: 2010:

£483-MIL. £565.9-MIL.

PPL Performance Collections Revenue:

2005: 2010:

£75.4-MIL. £124.1-MIL.



SGE Distribution Revenue:

1998: 2010:

€295-MIL. €340.1-MIL.

(In 2011, SGAE's offices were raided after accusations that they deverted millions of euros in funds intended for artists)



RAO Collections Revenue:

2005: 2010:

€1.1-BIL. RUB €2.7-BIL. RUB

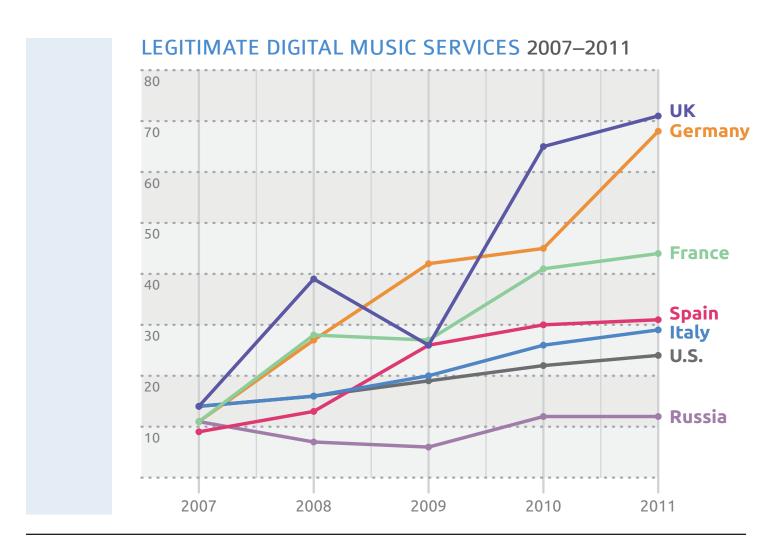
In Russia, collections have grown remarkably. RAO collected 1.1 billion rubles in 2005, and in 2010 it was at 2.7 billion rubles. As we've seen elsewhere, the growth was generally positive, with just a small dip from a high of 2.8 billion rubles in 2009.

The data from collection societies show pretty remarkable, consistent growth in collections and distributions across each of these countries, even in the face of significant recessions around the world and in Europe in particular.

► MUSIC STARTUPS

Technology has disrupted several media distribution channels, but out of the creative destruction, technology also has the potential to create even larger new marketplaces. Globally, there are about 500 music services legally offering digital music to users in at least 58 countries — up from less than 30 countries a little over a year ago. In major markets, the number of music startups has also been growing. In the US, at least a couple dozen digital music services were operating in 2011, up from about 14 in 2007. In the UK, over 70 music services existed last year, also up from 14 in 2007. Germany had 68 music services in 2011 and 11 in 2007. There were 11 French digital music services in 2007, and there were 44 last year. Spain had 31 in 2011, and just 9 in 2007. Italy went from 14 in 2007 to 29 last year. Lastly, Russia stayed about the same with 11 services in 2007 and 12 in 2011.

Among this newer wave of music companies, many of them must deal with the complication of negotiating intellectual property rights. Axel Dauchez (CEO of Deezer) has negotiated with 80 collecting societies and the four major record labels, and he's described the experience as "awful" — hinting that his business model as a subscription service was chosen because the contracts were quicker to sign. Spotify, Pandora and other similar music services have gone through the same ordeal with varying degrees of success — and generally end up paying significant music royalties to continue offering music to their users. While these royalty contracts pose some difficulties for music startups, there



have also been some gradual business model changes as labels and artists start negotiating new revenue streams with all kinds of digital music broadcasters — such as internet radio companies.

Eschewing these complex legal contracts, some musicians are creating crowdfunded sources of income. Ginger Wildheart released an album that outsold Rihanna and Coldplay and reached to a top ten spot on the UK album charts. Wildheart's modest recording budget (compared to traditional labels) made for a financially successful album, as his fans contributed £200,000 to the project in just a few hours. There are a growing number of independent artists testing out this model of direct-to-fan distribution. The benefit to the performers comes in the form of cutting out various middlemen and having more control over their own works, as well as keeping a larger share of their revenues as income.

The direct-to-fan model isn't for every musician, but the growing diversity of ways to earn a living as a musician is an optimistic sign for the overall music industry. With more ways to fund music creation, the creative wealth of the music industry is definitely on the rise and offering more opportunities for more artists. The revenues and funding for music may go up and down, but the culture of music isn't diminishing. And more individual music projects could help fund the creation of unique music sub-genres and help stabilize the entire music ecosystem.

2 VIDEO

The video industry has multiple facets that include traditional films/cinema, television and a variety of digital video formats — based on different recording technologies and business models that each segment of the market employs. The trend going from analog video towards digital media is opening up online distribution for all kinds of video and increasing the number of ways to reach audiences. Feature-length films can be broadcast on TV — and streamed to PCs and mobile devices as well. Conversely, shorter videos that have gone viral online have also been incorporated into TV shows and re-made for movie theaters. As a whole, the video industry has never been more popular — and there has never been a wider variety of screens to watch moving images.

► VIDEO PRODUCTION

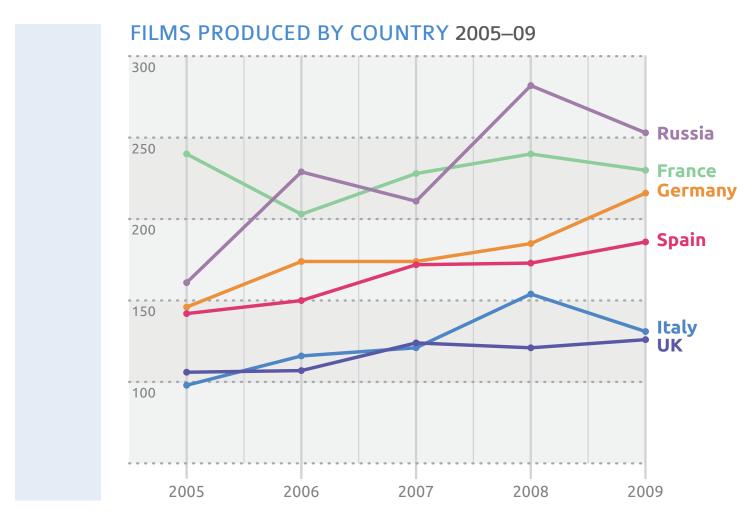
UNESCO tracks various kinds of cultural data, including feature film production, and reports that the worldwide production of feature-length films has grown from 2005 to 2009 (when its last survey was performed). These records are not exhaustively complete, but they still report noteworthy production growth from just over 5,600 films in 2005 to nearly 7,200 in 2009. Broken down by country, the US produced just under 700 feature films in both 2005 and 2009, making a consistent number of movies even during the depths of the Great Recession. Over the same period, Russia went from 161 films to 253 films. France created 240 films in 2005 and 230 in 2009, and Germany made 146 movies in 2005 and 216 four years later. Both Italy and the UK made about a hundred films in 2005 and 130 films in 2009.

GLOBAL FILMS

Year	Feature Films
2005	5,635
2006	5,255
2007	6,416
2008	7,020
2009	7,193
Total	31,519

FILMS BY COUNTRY, 2005–09

Country	05-09 Total	05-09 YOY
Germany	895	+70 ▲ 48%
France	1,141	-10 ▼ 4%
United Kingdom	584	+20 ▲ 19%
Italy	620	+33 ▲ 34%
Russia	1,136	+92 ▲ 57%
Spain	823	+44 🛕 31%



Beyond feature-length films, the production of short films, TV shows and internet videos has also grown over the years, but obtaining accurate figures for these categories are not as well documented. According to the European Audiovisual Observatory, the number of TV channels has grown significantly, from a few hundred (ca. 1999) to 9,800 channels in 2010. The most popular online video site, YouTube, reports that 72 hours of video are uploaded to its service every minute in 2012 — up from 8 hours of video for every minute in 2007. These online videos aren't broken down specifically by country, but 60% of all video viewings are seen by users who don't use English as their main language — which translates to about 1.8 billion views per day for non-English speakers. While the US is a dominant force for online videos, a few of YouTube's most-viewed videos, collecting over a hundred million views, originated in the UK and Italy.

► VIDEO REVENUES

The American movie industry has frequently warned its audiences about impending doom and gloom hovering over its theaters, but contrary to the predictions of an industry on its last legs, box office ticket sales have hit record highs in recent years. Globally, movie box office ticket sales grew from \$25.5 billion in 2006 to over

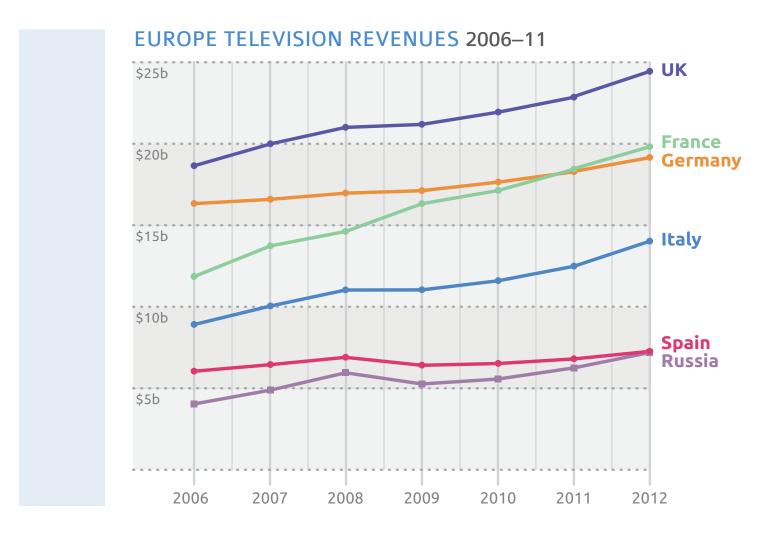


France's gross box office revenues reached €1.4-billion in 2011.



\$32.6 billion in 2011. In North America, ticket sales went from \$9.2 billion to \$10.2 billion in 2011. In Europe, 2011 was a record high year as gross box office revenues hit €6.4 billion (up 0.7% from 2010). Theatrical markets in France (€1.4B), the UK (€1.2B) and Germany (€0.9B) increased their gross box office revenues by 4.7%, 5.2% and 4.1%, respectively. However, Spain (€0.6B) and Italy's (€0.7B) markets both declined significantly, by nearly 5 to 10%. On the upside, Russia is expected to have a record box office year in 2012, on track ato reach \$1.3 billion by the end of the year (hitting \$682 million by mid-year, a 13% increase from 2011). So while there were some markets that fell, the record highs in other countries — during a weak global economic climate — points to an industry that can be remarkably resilient. Global movie consumption in major markets is also expected to rise even further in coming years, according to the IHS Screen Digest Video Intelligence Service. According to IHS, total movie spending (including movie tickets, Blu-Ray/DVDs rentals and purchases, VoD services and streaming movie services) hit a record \$62.6 billion in 2011, up 2.1% from 2010, and could hit a new high of \$64.2 billion in 2012.

In Europe, TV revenues are significantly smaller than the US market. Americans overall spend upwards of \$134 billion on TV entertainment, mostly on subscription TV services. Still, the European TV market is sizeable and growing. Combined revenues from TV ads and TV subscriptions grew from about \$18 billion in 2006 and is expected to hit about \$24 billion this year in the UK. French TV revenues were just under \$12 billion in 2006 and should be almost \$20 billion in 2012. In Germany, TV ads and subscription revenues were over \$16 billion in 2006 and are expected to be about \$19 billion this year. Italy's TV market was almost \$9 billion in size and should grow to about \$14 billion



over this period. In 2006, Spain's TV revenues were about \$6 billion and Russia's were about \$4 billion, but by 2013 both of these countries should reach a bit over \$7 billion.

► VIDEO AUDIENCES

Not surprisingly, the audience size for films and TV shows is relatively stable (since nearly the entire population of developed nations watches TV) compared to the size of the online video audience, which has grown steadily as internet broadband connections have improved. You-Tube is consistently in the top five most trafficked sites for the US (3), UK (4), France (4), Germany (4), Italy (3) and Spain (4) — and it just misses the top five for Russia (6). Despite being just 7 years old, YouTube has over 800 million users worldwide. This pace of adoption has caught Nielsen and other media monitoring services a bit flat-footed, as these services have not yet standardized their metrics for measuring online video audiences.



According to ComScore, 80% of the UK's total internet audience watched online video in January 2012...

NUMBER OF VIDEO VIEWERS IN JAN 2012

34-million

ComScore has recently started tracking online video viewership statistics in Europe, reporting that about 34 million people in the UK (80% of the UK's total internet audience) watched an online video in January 2012 — and that You-Tube was the main place UK residents went to watch, followed by videos on VEVO, Facebook and BBC sites. In France, nearly 40 million online video viewers watch sites like YouTube, DailyMotion and VEVO. Germany grew from nearly 30 million online video viewers in 2009 to become the largest national audience for online video in 2011 with about 45 million viewers. But even YouTube can't rest on its laurels as mobile video sharing apps are quickly gaining popularity — threatening to disrupt online video sites with social apps for sharing more personal videos.

► NEW TRENDS & BUSINESS MODELS

The growth of online video has attracted quite a bit of attention, as advertisers shift their spending to online video ads. UK advertisers have started to spend more on online video ads than on traditional TV ads. Additionally, some companies are adopting social media strategies that include sharing online videos as part of their customer service channel. The video industry as a whole is gradually shifting its distribution to internet protocols, as major film studios begin to release movies as digital downloads without a theatrical release first. In Spain, some popular films are experimenting with simultaneous releases in theaters, on DVDs and on Video-on-Demand TV services.



The 2011 Spanish film **No Habrá Paz Para Los Malvados** tried an innovative distribution plan and found success without the need for content windows: it was released simultaneously in theaters, on DVD, on pay-TV, and online.

Video on Demand (VOD) services have been on the rise for over a decade. The earliest VOD services launched in Italy and the UK in 2001, and the European Audiovisual Observatory estimated that over 700 VOD services existed in the EU by the end of 2008. In 2008, the UK had the most number of VOD services (145), followed by France (106), Italy (93), Germany (55) and Spain (25). The VOD market is still a small fraction (<1% in 2010) of the total audiovisual industry, but its market share has been gradually growing and becoming an online distribution method. In France, a partnership of independent producers and distributors of French cinema, called Le Meilleur du Cinéma, have created an online VOD service at universcine.com. This initiative started with just a dozen partners in 2001 and has grown to a membership of fifty — which notably accounts for nearly 40% of the feature films produced by France each year and nearly 20% of France's theatrical releases.

Movie streaming is becoming a significant video distribution market that isn't just the realm of companies like Netflix or LoveFilm, competing over various kinds of broadcasting rights. Amazon, the online retailer, is developing its own original video content in London — a strategy that could attract more customers to its main business of selling physi-

Record movie ticket sales during one of the worst global recessions in history argue against any waning demand for video entertainment.

cal goods. For several years now, the German automaker BMW has sponsored videos and short films — like TED-Talks and BMW's short film series, The Hire. These video creation projects specifically target online audiences and take advantage of the internet's infrastructure for efficient and cost-effective distribution. And these are just a few examples of unconventional video publishers creating widely seen films for the public — without direct payments from the audience.

At the same time, on the other side of the spectrum, crowdfunding services like Kickstarter, Indiegogo and others are providing more and more ways for consum-

ers to directly support filmmakers. Instead of commissioned works of art from a single wealthy individual, several film projects are gathering funds from a large pool of contributors (with widely varying financial resources). Other video services, like Vimeo, offer pay-to-watch options for viewers to financially support a vast collection of online videos. For funding other video projects, YouTube offers independent filmmakers a source of advertising revenues. There are a growing number of ways that filmmakers can find financial backing — more so than ever before in history. This situation can only lead to a more healthy video industry that produces are ever wider variety of content.

The growth of online video distribution and the business models to support filmmakers points to a bright future for the video industry as a whole. The cost of video production is falling significantly as high quality video cameras become more commonly available (on smartphones or as standalone devices). It has never been easier to distribute video with meaningful impact, as Middle East protesters have amply demonstrated. Record movie ticket sales during one of the worst global recessions in history certainly argue against any waning demand for video entertainment. Watching videos is an increasingly popular activity for all age groups and nearly every demographic, so business models for video production based on advertising and sponsorships are clearly proven and have a long-term future. While pessimists may be able to point to individual project failures, optimism appears to be clearly on the side of a vast digital media landscape.

3 BOOKS

The book industry has a long history with deeply ingrained traditions, and it faces modern technologies — along with significant challenges — that will disrupt its steadfast culture. The digitization of books offers both sizable opportunities, as well as risks for authors and publishers alike. With the introduction of ebooks, uncertainties are simply unavoidable as the market develops due to a new economic landscape without established business models to follow. However, it is without a doubt that ebooks will be a growing market for the near future, and in the long term, ebooks are expected to become a dominant force in the publishing industry.

► BOOK PRODUCTION

The publishing industry is growing at a phenomenal rate in terms of production. Authors are writing books as never before, and the world's libraries are filled with more new book titles than at any other time in history. In 1999, UNES-CO estimated the annual worldwide book production to be on the order of 1 million new titles published per year. Since then, estimates of the annual worldwide book production have more than doubled to over 2 million new books per year — and the rate is still accelerating.

PRINT MANIFESTATIONS BY YEAR OF PUBLICATION



According to a prominent book scanning project, there were around 130 million books in existence in 2010 (though exact numbers continue to be difficult to agree upon due to the haphazard and sometimes proprietary nature of book metadata, along with inconsistent definitions of books versus various kinds of serials and periodicals). Given available data, however, an extrapolation to about 135 million books wouldn't be unreasonable for 2012, and even assuming a more conservative rate, there should be at least 132 million books in the world today. But on top of these numbers, most book production estimates generally only include traditional books — books that have been published en masse and are distributed via wholesalers and retail outlets.

BOOKS PUBLISHED ANUALLY BY COUNTRY

Country	1995	2011
USA	62,039	328,259 429%
Germany	74,174	95,838* ▲ 29%
France	34,766	62,278 A 79%
UK	101,764	149,800 47%
Italy	34,470	57,558* ▲ 67%
Russia	33,623	122,915 A 266%
Spain	48,467	74,244 🛕 53%

Government agencies across Europe keep track of various cultural statistics, including traditional book publishing figures. In the UK, the official number of new book titles grew from roughly 102,000 produced in 1995 to almost 150,000 in 2011. The UK's annual book production fluctuated over that period, with the number of UK books possibly going over 206,000 in 2005 and briefly overtaking the US in terms of new books published that year. According to UNESCO statistics, the Russian Federation published just 34,000 new books in 1995, but its book market has developed immensely since then, publishing nearly 123,000 new titles in 2011 and becoming the third most-published country (besides the US and the UK) to create over 100,000 new books annually. Germany came close to joining that exclusive 100,000 club by publishing almost 96,000 new Germany titles in 2010, up from about 74,000 books in 1995. Spain published a bit over 74,000 new books in 2011, up from 48,000 in 1995. In 2011, French publishers created about 70,000 new works, roughly doubling the number of French books produced in 1995. Lastly, Italians enjoyed nearly 58,000 new books in 2011, up from about 34,000 in 1995. So for every one of these

countries, the number of new books written each year has grown significantly over time, and there seems to be no evidence that this trend will stop anytime soon. Just for comparison, the US published about 62,000 new books in 1995 and its production of traditional books rose to over 328,000 by 2010.

In addition to the consistent growth of traditionally-published books, there is an absolutely gigantic, unaccounted-for category of non-traditional books that has recently exploded in production volume (in the US, at least, where there are more available statistics) that include self-published titles, print-on-demand volumes and other books that may not be included in the ISBN database. Non-traditional books, as we've pointed out previously, vastly outnumber traditionally-printed books in the US, but data on non-traditional books from other countries are not as readily available. But based on the number and size of various print-on-demand services in Europe, the non-traditional book market is fragmented by language barriers and lags behind the US. Still, plenty of innovative books being written in Europe. For

example, a project from two German artists has automated the creation of books based on user-generated content from websites like Amazon and YouTube. There are also several projects that are working on generating books from machine translations (as well as crowdsourced human translations). While automated book publishing hasn't exactly produced the most erudite books or critically-acclaimed novels, these works are being generated in almost exponentially increasing volume and are still creating value — along with a cultural snapshot of the internet. Ultimately, a growing number of non-traditional authors and hyperprolific authors are writing books at an unprecedented speed, and the result is a bewilderingly large library of books that offers consumers more choices than ever before.

► BOOK INDUSTRY REVENUE

According to several different reports, the United States has the largest market for books with revenues of roughly \$30 billion each year from 2008-2010, and these revenues haven't changed that much in recent years — rising just a bit, but not falling even during the worst economic recession. The story is similar across Western Europe — its overall book industry revenues are approximately \$30 billion per year, but depending on the country, revenues may have dipped in the years running up to 2010. Worldwide, spending on consumer books was roughly \$112 billion in 2011, up slightly from about \$110 billion in 2010 (the same as in 2007), with the trend over the last several years being slow growth. For the next five years, projected global revenues are expected to increase by less than 1% compounded annually as well. So the consumer book industry has weathered the Great Recession relatively well, remaining remarkably stable during tough times — all while competing with video games, TV, movies and other forms of entertainment and information at the same time.

According to PwC figures, the book markets of the largest European economies were moderately stable over the last few years. At the head of the class, Germany's book industry revenues grew the most, actually rising from just under \$6 billion in 2008 to nearly \$6.3 billion in 2010 — an impressive 5% growth rate amid economic turmoil. France had steady revenues of \$5.3 billion over the same time span. Italy also held steady with \$3.3 billion in annual revenues. However, three other major economies lost a bit of ground in their book markets during the global recession: the UK dropped from \$3.6 billion to \$3.2 billion, Spain fell from \$2.3 billion to



Amidst economic turmoil, Germany's book industry revenues **grew by an impressive 5%** between 2008 and 2010.

2008: 2010: **\$6-BILLION \$6.3-BILLION**

\$2.0 billion, and Russia went from \$1.3 billion to \$910 million in annual revenues. (Separate estimates from the Russian government of its book market are substantially higher but still show a decline of book sales from \$2.9 billion in 2008 to \$2.2 billion in 2011, so the percentage drop remained roughly the same, even using different methodologies for assessing Russia's book industry.) To provide additional context for the Russian publishing industry, in the years running up to the global recession, the Russian book market had experienced significantly larger revenue growth than most European nations — with 10-20% annual increases in book sales from 2004-2008. With a less mature marketplace, the Russian book industry developed and grew much faster than other countries' publishing industries before the financial crisis, but on the other hand, it was evidently hit harder after 2008.

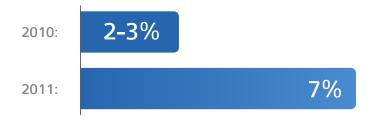
► THE GROWTH OF EBOOKS

Every country is in its own stage of development for digital books or ebooks. By some measures, the US is the most digitally developed, as ebooks have penetrated the American market well into the double digits — with a study by AT Kearney reporting that US ebook revenues have risen to about 20% of the total US book market revenues in 2011. Globally, ebooks are growing by leaps and bounds, from being nearly non-existent just a few years ago to representing increasingly important fractions of publishers' total revenues. IDATE projects that the worldwide ebook market will grow, on average, by 30% per year from 2010 to 2015. Other figures generally agree upon double digit growth rates and also report that the North American ebook market is maturing faster than other continents, followed by Asia in second place and Europe coming in third. Both IDATE and PwC are optimistic that digital book revenues will offset declines in physical book sales, so ebooks are expected to steadily add to total book revenues — instead of cannibalizing revenues from traditionally-printed books. Additionally, associated ereader hardware sales are expected to skyrocket from 3.3 million units sold in 2010 to 29.8 million units by 2015.



UK ebook revenues have been growing rapidly in terms of market share — especially impessive considering there is a 20% VAT on ebooks, but no taxes at all on printed books.

UK EBOOK REVENUE MARKET SHARE:



The UK's ebook industry is generally seen as the closest national market — outside of North America — that could catch up with the US in terms of ebook market penetration. UK ebook revenues hit 7% of the total book market in 2011 and are headed towards a double digit market share (up from just 2-3% in 2010). This growth of ebook sales is particularly notable given that taxes greatly favor printed books in the UK. The UK government doesn't tax printed books at all, but it has levied a 20% tax on ebooks (and presumably driven some UK consumers to download digital books from other countries such as Luxembourg where the VAT is a slightly lower 15%). Some proposals in the UK to lower taxes on ebooks are underway — which could give a further boost to the ebook market if consumers see lower prices.

Other nations around Europe have less mature ebook markets with lower, single digit percentages of ebook penetration — and there's some blame on tax policies

limiting the growth of ebooks, since many European nations have reduced taxes on printed books but maintain full VAT rates of roughly 20% on digital books (though some countries — France being the first EU member to do so — are reducing VAT rates for ebooks to be on par with printed books). However, as we just mentioned, taxes in the UK heavily favor printed books, but the rate of ebook adoption doesn't seem sluggish there at all.

In Germany, a reading study tried to answer the question of whether or not people read better on digital screens or on paper. German researchers want to determine if printed text on paper was a superior reading experience, but the study actually showed no difference. So despite there being no measurable difference between reading a printed page or a digital screen, a significant cultural habit among Germans seems to prefer printed books still. Presumably,

other Europeans may harbor similar biases against ebooks which may be, in addition to the higher tax rates on ebooks, preventing some consumers from switching to ebooks as quickly as they could. This prevailing opinion could change as tablet devices become more popular and more affordable — and as technology improves battery lifetimes and display performance. And obviously, other factors could also be at work, including the practices of the existing book industry infrastructure and book publishers in Europe — and fixed pricing for books. Across several European nations (Germany, France, Greece, Italy, the Netherlands, Austria, Portugal and Spain), book publishers — and not bookstores — set the prices of their books, so that no matter where a consumer buys (at a large bookstore or a small one), the price of a given book is the same.

Fixed pricing agreements for books are a century-old tradition in Germany, and fixed-price practices eventually became federal law in Germany in 2002 — with fines up to 6,000 euros as punishment for violating these pricing contracts. This German law gives publishers the right to set prices on all new books along with an option to lift the fixed prices after 18 months. Ultimately, this scheme allows some European publishers to have more control over the book market, and it also prevents major market disruptions from online retailers like Amazon. Germany's book industry is highly regulated in this way, and it creates a very centralized structure for selling books — resulting in a publisher-created online marketplace called libreka! for digital books that is much larger than similar offerings from Apple, Amazon or Google. Furthermore, the availability of digital books is limited by the publishers — with about a third of all new German books being available in a digital format and only a fourth of Germany's new bestsellers offered as ebooks.

Amidst the prevalence of fixed-price agreements in largest economies of Europe, Germany's ebook market grew significantly and represented about 1-2% of its total book market revenues in 2011, up from less than 0.5% in 2010. France's ebook market penetration was less than 0.2% in 2010 and hit nearly 2% market share in 2011. Spain had ebook sales that were less than 0.1% of its total book market in 2010, but its ebooks reached a 1.6% market share in 2011. Italy's ebook market was just starting out in 2010 at less than 0.1% penetration in 2010, but it hit about 1% in 2011. Outside of Western Europe, in Russia, digital books also represented about 1% of that total book market (but Russia's ebook market growth may be limited by other factors such as risk-averse publishers who are wary of Russia's reputation for digital piracy). So while these ebook markets are relatively small compared to their respective printed book markets, ebooks are still gaining ground and are expected to grow even more in the future. The overall trend for ebooks is clearly very encouraging for robust growth, and the potential for future growth and the higher profitability of digital text appear promising.

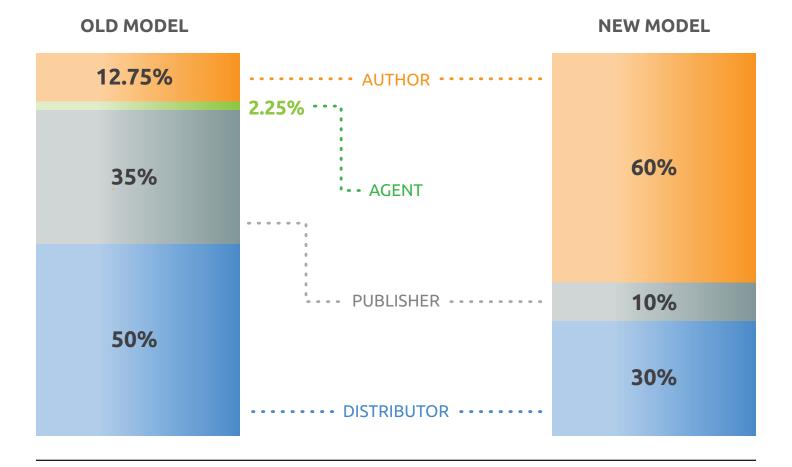
► BUSINESS MODELS

Some publishers are in the midst of a getting rid of DRM for their books (or deciding to ditch DRM), in an attempt to avoid the lock-in effect of creating a dominant hardware device out of an iPad, Nook or Kindle. The Pottermore empire provides a significant milestone for allowing readers to get Harry Potter books on a Kindle without going through Amazon's bookstore. It's not certain if other major publishers will follow suit, but there are constant reminders of how the music industry allowed Apple to dominate the MP3 player market with DRM — which ultimately was dropped so that record labels weren't so reliant on Apple for digital distribution.

In the US, publishers are also struggling with a class-action lawsuit over colluding to fix prices with Apple. Five major publishers and Apple agreed to an "agency model" for pricing digital books and, with that agreement, wrestled away Amazon's dominant market share. Publishers were concerned that Amazon's position was threatening their ability to set a floor on ebook prices, so they partnered with Apple to create an alternative pricing scheme that didn't allow Amazon to use ebooks as a loss leader for its other services. The lawsuit is not quite settled yet, but Amazon was successfully prevented from creating an ebook monopoly in the US. As we noted earlier, though, price-fixing agreements are long-standing traditions in many parts of Europe, but it's unclear how long those practices will continue. Publishers may need to adapt more quickly to an unregulated marketplace and accept that lower ebook prices are a reality that will help spur greater ebook adoption rates by consumers and potentially sell more ebooks.

There are some obvious benefits of selling ebooks over printed books. Publishers no longer need to worry about inventory of physical books. The distribution system becomes much simpler and cheaper since there are no complicated return policies. The digital world is also a more economically efficient one with fewer barriers for importing and exporting to other countries — creating more opportunities and a larger audience of consumers. Some publishers are also excited by the opportunity of offering their services to a growing pool of writers — and providing editing and marketing services could expand the scope of publishers and bring in additional streams of revenue. On the author side of the equation, writers can earn a much larger fraction of their book revenues since there are fewer middlemen in the process of selling digital books.

CHANGING BUSINESS MODELS IN PUBLISHING



Traditionally, when book publishers signed deals with authors, the author was given an advance and the revenue split after the book was released heavily favored the publisher — granting the publisher/distributor a majority of the book's revenues, with the author earning up to 20% but usually less. These royalty rates for authors vary widely based on the author and anticipated popularity of the book, but royalty rates of about 8% for paperback editions (following a hardcover release) are typical. With self-publishing, the revenue splits between authors and distributors largely favor the authors — with authors receiving royalties of 35% and usually more. Several ebook publishers are offering authors upwards of 60% of the book's sale price back to the author. Lulu.com, Amazon, Smashwords and others have varying ebook distribution deals that allow authors to self publish and retain up to 85% of their book's proceeds. Additionally, the self-publishing model is much more transparent for authors, as the royalty rates are not typically negotiated in secret and as independent authors share their experiences with various publishers.

The shift towards publishing digital books is not going to stop, and if anything, it may even accelerate as tablet devices improve. Several analysts very matter-of-factly state that ebooks and digital publishing are inevitable — and that it's only a matter of time before publishers will be considering ebooks as their primary source of revenue. There is still an on-going debate over how publishers and authors can compete with piracy and how digital books should be optimally priced. But ultimately, the end game will be about providing digital content and valuable services to readers in a way that enlarges the entire book market, and it's not difficult to envision a future situation of ubiquitous ebooks that are easily purchased on mobile devices by a growing audience of consumers who voraciously read on the same handheld devices that they play video games on and use to communicate with their social networks. Getting to that destination, however, may not be without challenges.

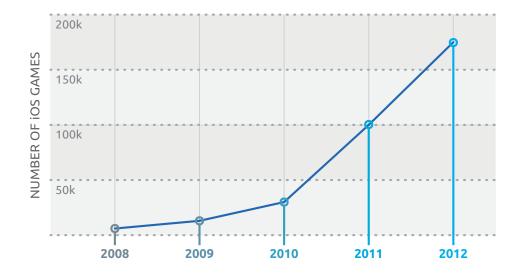
4 VIDEO GAMES

Compared to other creative industries, the video game industry has adapted remarkably well to technological innovations and business model changes. Compelling and financially successful video games have been created by giant game publishers with million dollar development budgets — as well as by individual programmers working part-time at home. Video games are undoubtedly part of an expanding market that is moving beyond consoles/PCs to smartphones, tablets, social networks and into nearly every part of daily life.

VIDEO GAME PRODUCTION

Not surprisingly, the video game market is closely tied to developments in the overall computer industry. As computer hardware has become cheaper and more widely available, entertainment software has similarly grown and become more mainstream and appealing to larger audiences. Unfortunately, the relatively short development life cycle for computer hardware also means that software can become obsolete in just a few years — and keeping track of game production statistics over a long period of time is not a simple task. Still, looking at more recent, popular video game platforms shows remarkable growth. For Apple's iOS platform, which started with just a few thousand games in 2008, there are currently close to 200,000 games now (available to over 150 million of Apple's Game Center users) — and these games were created at an accelerating rate during one of the worst recessions in history.

GROWTH OF IOS GAME APPS 2008–12



For the PC platform, one of the biggest online game distributors is Steam, which launched in 2002 with less than a handful of games. By 2007, Steam had about 150 games. In 2010, Steam started to translate its services to support 25 languages, and it currently offers over 1,100 games to 40 million users worldwide. To help accelerate the number of games Steam distributes, it created a community-powered voting system to get feedback from players on which games would be popular — as Steam ad-

mitted that its small employee team could not properly vet a large number of games for distribution as well as the collective user base of Steam could. Over the last few years, more and more digital distribution stores for games have appeared online — from large software companies such as Microsoft, Apple, Amazon and Google to much, much smaller game distributors for all kinds of niche game makers (eg. Desura, Big Fish Games, etc). This trend is expected

to continue — and an ever growing number of game titles is expected to fill virtual shelves that don't have the physical space restrictions of brick-and-mortar stores.

Digitally-distributed games are becoming more mainstream, but games bought on physical media still account for the majority of games sold (based on revenues). These game titles are generally backed by large publishers, and the production of the these games has also grown over the years. A collection of these game titles (via Freebase) shows that these notable games numbered in the hundreds in the 1980s and now approach a couple thousand titles.

PRODUCTION OF VIDEO GAMES 1989–2009



▶ VIDEO GAME INDUSTRY REVENUE

The video game industry is a relatively young market, but despite only existing for a few decades, it's a multi-billion dollar field that has matured quickly. Worldwide, the video game industry has grown from about \$30 billion in size in 2006 — to roughly \$70 billion in 2011. Consistently, US revenues accounted for approximately half of the global market for video games. Over the same time period from 2006-2011, UK video game revenues grew from almost \$3 billion to nearly \$5 billion. French video games went from about \$2 billion to nearly \$4 billion. German game revenues

nues started under \$2 billion in 2006 and hit just under \$3 billion in 2011. Spain grew from about \$1 billion to about \$1.5 billion. Italy went from almost \$900 million to \$1.4 billion, and Russia had \$600 million in video game revenues that just topped \$1 billion in 2011.

The UK market for video games is expected to continue growing, and compared to other creative industries in that country, computer games and related electronic publishing had the highest growth rate, at about 9% per year — and accounted for a third of the UK's creative industry's exports. In 2009, sales of video games in the UK actually exceeded consumer spending on films. In that same year, there were about 25 million console game systems being played by British consumers — nearly enough for nine out of every ten households in the UK.

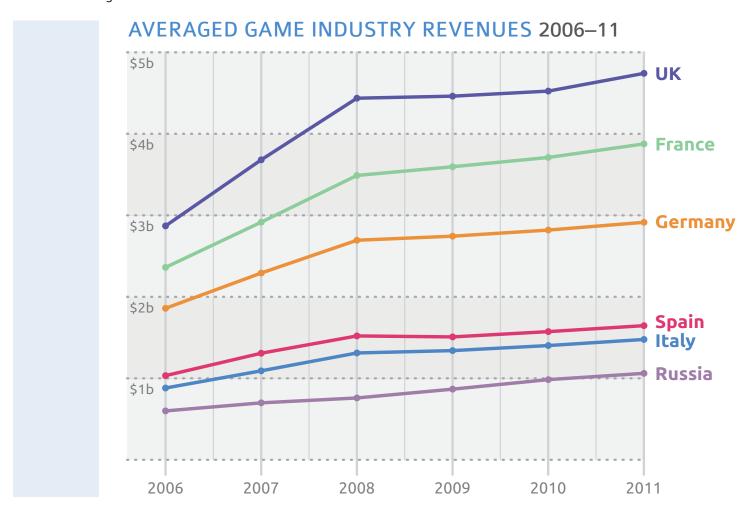


- Video games have the highest growth
 rate of all creative industries
- Video games account for a third of all creative industry exports
- 2009: Sales of video games exceeded consumer spending on films

GAME REVENUES, 2006 – 2011

165%

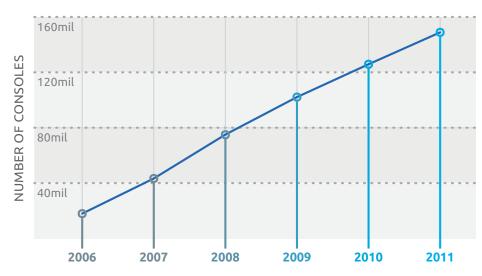
Recently, the UK government has passed tax breaks for video game companies to encourage even more development, and the Italian government has proposed similar tax incentives for its own game development efforts. Meanwhile, France has had tax breaks for game developers since 2007, but EU regulations may prevent some of these incentives from continuing.



► GAME DEMOGRAPHICS

Beyond revenues, the gaming audience in Europe has expanded significantly in recent years as well. Gaming device ownership and usage is higher per capita in the UK, France and Germany than it is in the US. Less than 20 million European video game consoles were purchased in 2006, but by 2011, there were about 150 million dedicated game sys-

EUROPEAN GAME CONSOLES, 2006-11



tems in European homes. Additionally, European gamers numbered about 40 million in 2008 and then more than doubled by 2010 to 95 million. Further room for growth still exists, as mobile games and casual games are also becoming increasingly popular, and games have been some of the most popular apps on mobile devices.

EUROPE-WIDE GROWTH

Estimated number of European gamers more than doubled from 2008 to 2010

EU GAMERS, 137%

► GAME CREATION & NEW BUSINESS MODELS

While Europe is notably absent from producing video game console hardware (a segment of the industry dominated by the US and Japan), many countries still have an extremely influential role in the game industry by producing immensely popular software. For example, Tetris, created by Alexey Pajitnov in his spare time while working for the

Moscow Academy of Sciences, was named the "Greatest Game of All Time" in 2007 - and is one of the bestselling mobile games ever (surpassing 132 million paid downloads in 2011). Tetris has been released on nearly every gaming platform worldwide, translated into more than 50 languages, with players in over 185 countries. It has inspired dozens of clones and variants, and the game is often used as a "hello world" project for beginning programmers. Interestingly, Tetris was never patented, but similar games have been threatened with copyright and trademark infringement in recent years. These enforcement efforts have limited the spread of Tetris clones, but overall, this simple game is credited with starting the entire casual gaming market.

In Germany, the social/casual gaming trend is taking off with companies like Wooga - which has become one of the largest developers of games for social networks and mobile platforms. Wooga has seen enormous growth in its active users — launching in 2009, getting a few million monthly active users in 2010 and now reaching 45 million monthly active users. Elsewhere in Germany, Bigpoint Games has over 200 million registered users for its browser-based games — and Gameforge has over 300 million registered players. In 2009, these two game companies were also the fastest growing IT companies in Germany. Browser-based games "need no retailer, no



Almost 30 years after its creation, Tetris remains one of the most influential and popular games of all time, and is credited with starting the casual gaming market.

NUMBER OF TETRIS MOBILE GAME PAID DOWNLOADS IN 2011:

132-million



- Social gaming upstart Wooga rocketed to 45-million monthly users in just a few years
- 2009: The two fastest-growing German IT companies were game companies

operator" and avoid piracy problems because the games are generally free-to-play and rely on in-game purchases that enhance the game with virtual goods and capabilities. These games have eliminated the physical distribution of their software and focus on providing players with on-going entertainment as a service. Several other game developers have also adopted the free-to-play business model to avoid piracy, and video game developer associations highly recommend freemium business models and other measures that are proving to be effective ways to acquire new players and keep them playing (and paying).

Industry observers in the UK have pointed out the success of new business models that don't rely on selling software on physical media. Selling boxed software is still a major revenue stream in the game industry, but digitally distributed games are gradually taking over as broadband connections continue to improve. Large game publishing compa-

In Russia, video game piracy was once thought to be such an overwhelming problem that some distributors would ignore the market. But with some innovative tactics, Steam has grown its service to the point where its Russian customers accounted for more revenue than its sales in any European market except Germany.

nies recognize the need to adapt to this change and, at the same time, smaller game development teams also see an opportunity to be able to compete on a playing field where consumers buy games based on the quality of the game and not as much on the size of marketing budgets or retail chain distribution. As we've noted before, Steam has become a hugely successful distributor of video games — even in Russia, where piracy was once thought to be such an overwhelming problem that some distributors would ignore the market. But with some innovative tactics, Steam has grown its service in Russia to the point where its Russian customers accounted for more revenue than its sales in any European market except Germany.

Game developers are extremely open-minded when it comes to creating new business strategies. Games are on the forefront of creating virtual economies and virtual currencies that could generate new revenue streams and open up profitable markets within a game environment. Several economists have been hired by game companies to research the opportunities and to make virtual economies realistic for players — and to ensure the prosperity of the game makers themselves. Presumably, as virtual games become more and more complex, the virtual economies that support the game will grow to the point where they might be as big as some real-life countries — and collecting in-game taxes or other forms of revenue will amount to increasingly sizable amounts of real-world currency.

Game makers are also willing to experiment with their

own funding models and try services like Kickstarter. Small developer teams have raised millions in funding to create video games with niche audiences — games that might be too risky for a publisher to finance ordinarily. It has been a breakthrough year for crowdfunded games. In February, a game called Double Fine Adventure collected over \$1 million in 24 hours and ultimately raised over \$3.3 million. A handful of other game projects have also raise over a million dollars, but the funding amounts aren't as important as the resurgence in how games can be made by highly productive teams (or individuals) — and how it's easier and easier for games to appeal directly to large audiences.

The pace of technological development has driven game developers to look forward towards new ways to engage players. When hardware platforms for game consoles have a limited lifespan, programmers are driven by this immutable reality to move ahead and not to dwell too much on past software and hardware releases. It is clearly evident that players crave new challenges and entertainment all the time, so there's no lack of demand for fun video games. Certainly, there are business challenges for producing games that players will buy — or that have virtual goods with tangible value for players. But plenty of examples exist that demonstrate the possibilities of reaching vast audiences with video games and that the funding video game development isn't getting harder and harder with time. With more and more ways for players to directly pay game makers, there are more options than ever before to support a video game. At the same time, ad-supported games are offering alternative revenue streams for free-to-play games. Game companies are adapting to an increasingly digital world — and this is a widely accepted trend for software in general, so the optimism in the video game industry for capitalizing on more efficient software distribution is more readily seen as an opportunity rather than a digital hurdle. Game companies are open to earning their income one quarter at a time, so it's not such a stretch of the imagination for video games to adapt to microtransactions and other innovative strategies.

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