



## Transatlantic Trade and Investment Partnership (TTIP)



### Pig Production in the EU and US

Pig production is an important agricultural activity in both the EU and US. During the post-war period, pig farming underwent significant intensification and industrialisation on both sides of the Atlantic. Traditional small-scale family farms were increasingly supplanted by industrialised production units that use extreme confinement systems to maximise productivity.

There are, however, significant differences between pig production methods and legal protections in the EU and US, particularly with regard to animal welfare and the use of certain veterinary drugs. The divergence between the two parties, particularly with respect to EU food safety rules, has thus far proved to be an impediment for most US producers to place their pig meat products on the EU market.

Agribusiness interests will undoubtedly regard TTIP as an opportunity to remove these existing trade barriers. The present briefing outlines why achieving a trade deal should not be at the expense of the EU's higher animal welfare standards and more stringent, precautionary measures to protect public health.

#### Value and volume of EU-US trade in pig meat

Each year, around 22 million tonnes of pig meat is produced in the EU<sup>1</sup>, while the US produces over 10 million tonnes of pig meat.<sup>2</sup> Indeed, the EU and the US are respectively the world's second and third biggest pig meat producers, surpassed only by China.

#### 2011 EU and US Pig Production

EU Member States	1,000 tonnes carcass weight	Number of pigs (in millions)	US States	1,000 tonnes live weight	1,000 tonnes carcass weight <sup>3</sup>	Number of pigs (in millions)
Germany	5,598	28.3	Iowa	3,709.17	2,729.94	20.0
Spain	3,479.5	25.3	North Carolina	1,359.5	1,000.59	8.9
France	1,998.3	13.8	Minnesota	1,261.82	928.7	7.8
Poland	1,810.8	11.1	Illinois	1,225.15	901.71	4.7
Denmark	1,718.4	8.7	Indiana	1,034.47	761.36	3.2
Italy	1,570.2	12.3	Missouri	1,029.88	757.99	3.9
Netherlands	1,347.2	12.1	Nebraska	954.78	702.72	2.3
Belgium	1,108.3	6.4	Oklahoma	704.5	518.5	2.2
UK	806	4.2	South Dakota	569.45	419.16	1.9
Austria	543.8	3.0	Pennsylvania	330.8	243.47	1.4
Portugal	383.8	2.0	Virginia	286.23	210.67	1.1
Other EU MS	2,024	19.8	Other US states	1,333.47	1,684.14	9.2
<b>Total EU 28</b>	<b>22,388</b>	<b>147.0</b>	<b>Total US</b>	<b>13,799.23</b>	<b>10,156.23</b>	<b>66.4</b>

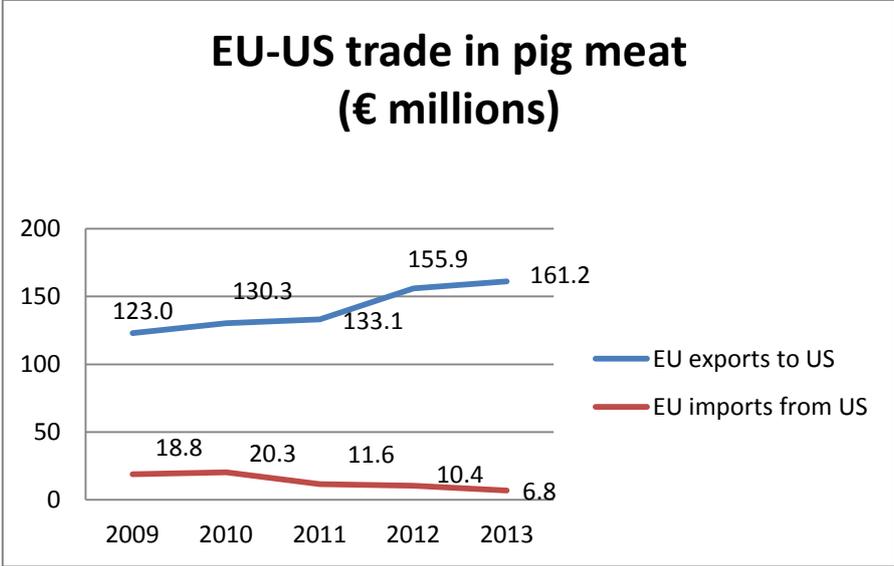
Pig production in the EU is also concentrated in just a few Member States with large farms with 200+ breeding sows; small-scale farms with fewer than 10 sows are found primarily in newer Member States.<sup>4</sup>

<sup>1</sup> Eurostat data. 2012 data. Source notes that the number fluctuated +/- 5% between 2005-2012 [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-FK-13-001/EN/KS-FK-13-001-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-FK-13-001/EN/KS-FK-13-001-EN.PDF)

<sup>2</sup> USDA, National Agricultural Statistics Service, Agricultural Statistics 2012. Data from 2011 (Table 7-32, converted from pounds into tonnes) [http://www.nass.usda.gov/Publications/Ag\\_Statistics/2012/](http://www.nass.usda.gov/Publications/Ag_Statistics/2012/)

<sup>3</sup> Carcass Weight calculated on the basis of 73.6% of live weight (US National Pork Board recommended dressed weight ratio)

Although not the biggest producer, the EU is presently the largest exporter of pork worldwide. In 2013, EU Member States exported 1.6 million tonnes of pig meat valued at 3.8 billion Euros to third countries, including the US.<sup>5</sup> However, the EU only imports pig meat from a limited number of non-EU countries, primarily due to its strict food safety requirements; only five US slaughterhouses are currently approved for the slaughter of pigs for export to the EU.<sup>6</sup>



In 2013, a total of 13,094 tonnes of pig meat imports valued at 38.0 million Euros was imported from non-EU countries, including the US, which was the third biggest importer of pig meat to the EU that year after Chile and Switzerland.<sup>8</sup> The EU and the US currently apply a 0% tariff rate to most traded pig meat products; only spare ribs, plus (processed) hams/shoulders and cuts thereof are subject to a tariff of USD 1.4 cent/kg when traded transatlantically.<sup>9</sup>

**Animal welfare concerns**

There are serious animal welfare problems associated with intensive pig production, which have not yet been adequately addressed by the majority of US states. Adult female pigs used for breeding are still routinely confined to sow stalls (also known as gestation crates). These are individual metal enclosures, which are so restrictive that pigs cannot turn around in them. Sows kept in such stalls suffer a number of significant welfare problems, including elevated risk of urinary tract infections, weakened muscle and bone, behavioural restriction and stereotypic behaviours, such as bar-biting. In addition, painful mutilations, such as tail-docking, tooth cutting and piglet castration without anaesthetic, are routinely carried out on pigs on both sides of the Atlantic.

**EU legislation regarding the welfare of pigs on farm**

In 2001 the EU passed a Directive requiring a phase-out of the use of individual stalls for pregnant sows, except for the first four weeks of gestation and one week before farrowing. Council Directive 2008/120/EC laying down minimum standards for the protection of pigs also prohibited the tethering of sows, banned routine tail-docking, established requirements for environmental enrichment for pigs and sought to improve the flooring surfaces on which pigs are kept. This

<sup>4</sup> P. Marquer (2010) Pig farming in the EU, a changing sector. Eurostat. Statistics in focus 8/2010. [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-10-008/EN/KS-SF-10-008-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-10-008/EN/KS-SF-10-008-EN.PDF)  
<sup>5</sup> [http://madb.europa.eu/madb/statistical\\_form.htm](http://madb.europa.eu/madb/statistical_form.htm)  
<sup>6</sup> [https://webgate.ec.europa.eu/sanco/traces/output/US/RM\\_US\\_en.pdf](https://webgate.ec.europa.eu/sanco/traces/output/US/RM_US_en.pdf)  
<sup>7</sup> DG Trade, Market Access Database. Product code 0203000000 [http://madb.europa.eu/madb/statistical\\_form.htm](http://madb.europa.eu/madb/statistical_form.htm) and <http://hts.usitc.gov/>  
<sup>8</sup> Ibid  
<sup>9</sup> Ibid

legislation fully entered into force on 1<sup>st</sup> January 2013 after a lengthy phase-out period. There is still significant room for improvement in this legislation and better enforcement is needed, particularly with respect to the practice of tail-docking that continues largely unabated<sup>10</sup>, but these minimum EU animal welfare standards should provide the starting point for negotiations between the EU and US on pig products.

### **US legislation regarding the welfare of pigs on farm**

In contrast to the EU, there is no federal US legislation specifically with regard to pig welfare. However, following ballot measures or the adoption of state legislation, nine US states have now prohibited or are phasing out the use of individual sow stalls. Bans have already taken effect in Florida, Arizona, Oregon, Maine and Rhode Island; while similar measures are due to enter into force in California (2015), Colorado (2018), Michigan (2019) and Ohio (2025).

Aside from these progressive states, it should be noted that advancement in pig welfare in the US is partly being driven by leading food corporations in the US. Major chains, such as McDonald's, Wendy's, SUBWAY and Oscar Mayer, have made commitments to eliminate sow stalls from their supply chains in the US. There is also significant public support for such animal welfare improvements. An American Farm Bureau poll found that 95 percent of Americans believe farm animals should be well-cared for, and that most Americans do not consider sow stalls to be humane.<sup>11</sup>

### **Transport of pigs in the EU and US**

Pigs are susceptible to heat stress because they do not have sweat glands and consequently their welfare can be significantly compromised during transport to slaughter. Regulation (EC) No 1/2005 on the protection of animals during transport and related operations is intended to prevent injury and suffering to animals and ensure that they are transported under appropriate conditions that meet their needs.

This EU legislation prohibits the transport of pigs less than 3 weeks old (for longer than 100 km) and sows during the last stages of gestation and during the first week after giving birth. Pigs in the EU are permitted to be transported for 24 hours provided they have continuous access to water, after which they must be unloaded, fed, watered and rested for a minimum of 24 hours at an approved control post before being allowed to be transported for another 24 hours.

It should be noted that there is significant intra-EU trade in live pigs, which in many cases involves long-distance transport of more than 8 hours and raises concerns about animal welfare. Both Denmark and the Netherlands, for example, are major exporters of young pigs since they both have a specialised pig breeding sector. Germany is the biggest importer of these young pigs, as well as being the main importer of pigs for slaughter. The Netherlands is the biggest exporter of pigs for slaughter; Spain, Denmark and Germany are also major exporters of pigs for slaughter.<sup>12</sup>

In the United States, Title 49 of the U.S. Federal Code, section 80502, limits the transport of animals to 28 hours or less.<sup>13</sup> Known as the 28-hour law, this legislation requires animals to be unloaded for feeding, water, and rest for at least 5 consecutive hours before resuming their journey. There are no US laws prohibiting the transport of young, gestating, or otherwise vulnerable pig populations.

In the US, pigs may be transported over long distances. While many journeys are short (less than 300 miles), animals used for agricultural purposes are increasingly being transported over longer

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<sup>10</sup> <http://www.ciwf.org.uk/our-campaigns/investigations/pig-investigations/>; <http://www.ciwf.org.uk/research/species-pigs/fvo-reports-on-failure-to-enforce-pigs-directive/>

<sup>11</sup> <http://asp.okstate.edu/baileynorwood/Survey4/files/InitialReporttoAFB.pdf>

<sup>12</sup> P. Marquer (2010) Pig farming in the EU, a changing sector. Eurostat. Statistics in focus 8/2010.

<sup>13</sup> [www.law.cornell.edu/uscode/text/49/80502](http://www.law.cornell.edu/uscode/text/49/80502)

distances due to movement of young pigs across state lines for feeding in the Midwest<sup>14</sup> and due to concentration of the slaughtering industry into fewer, larger plants.

### **Slaughter of pigs in the EU and US**

Regulation (EC) No 1099/2009 on the protection of animals at the time of killing requires slaughterhouses in third countries seeking to export meat to the EU to comply with standards similar to those stipulated in the legislation. The Regulation stipulates that “Animals shall be spared any avoidable pain, distress or suffering during their killing and related operations” and lays out very specific requirements and methods for stunning and slaughter that vary by species. These requirements and methods are based on underlying scientific study.

The United States also has a federal humane slaughter law, but it is much less comprehensive. Sections 1901-1907 of Title 7, Chapter 48 in the U.S. Federal Code stipulate that all animals must be rendered insensible to pain, or stunned, prior to being “shackled, hoisted, thrown, cast, or cut” and lists acceptable methods (“a single blow or gunshot or an electrical, chemical or other means that is rapid and effective”).<sup>15</sup> However, the law does not detail the acceptable methods by species. Alternatively, animals must be killed by a religious method.

### **The use of non-therapeutic drugs in animal agriculture**

In addition to extreme confinement systems, the industrialisation of animal agriculture has also led to the use of and reliance on antibiotics, hormones and feed-additives to promote growth or leanness in animals being raised for meat. The widespread non-therapeutic use of antibiotics in farm animals in both the EU and US has led to significant concerns with respect to antimicrobial resistance (for more information, please see our separate briefing on this issue).

The EU explicitly prohibits the administration of thyrostatic substances, stilbenes (i.e. synthetic oestrogenic hormones) and their derivatives, oestradiol-17 $\beta$  and its ester-like derivatives,  $\beta$ -agonists and substances with an oestrogenic, androgenic or gestagenic action to farm animals for the purposes of growth promotion.<sup>16</sup> In addition, the import of animals, meat or products of animal origin from countries that permit the use of these substances to animals intended for human consumption is prohibited in the EU, unless these countries offer an equivalent guarantee for exports, such as a segregated breeding system.

This creates a barrier to trade particularly with respect to the widespread use of **ractopamine** in the US pig industry. This is a  $\beta$ -agonist that is commonly used as a feed additive for finishing pigs to increase weight gain, improve feed efficiency and produce leaner pig meat.

Ractopamine was banned in the EU due to concerns about veterinary drug residues in meat and insufficient data upon which a MRL could be established. There are also animal welfare concerns about adverse effects of the drug in pigs with symptoms, such as an elevated heart rate<sup>17</sup>, increased impulsive aggression,<sup>18</sup> abnormal behaviour,<sup>19</sup> hoof lesions<sup>20</sup> and difficulty walking<sup>21</sup> having been

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<sup>14</sup> Shields DA and Mathews KH. 2003. Interstate livestock movements. U.S. Department of Agriculture, Electronic Outlook Report from the Economic Research Service. [www.ers.usda.gov/publications/lpdm-livestock,-dairy-and-poultry-outlook/lpdm10801.aspx#U62pWPldVyI](http://www.ers.usda.gov/publications/lpdm-livestock,-dairy-and-poultry-outlook/lpdm10801.aspx#U62pWPldVyI)

<sup>15</sup> [www.fsis.usda.gov/wps/portal/efsis/topics/rulemaking/humane-methods-of-livestock-slaughter-act](http://www.fsis.usda.gov/wps/portal/efsis/topics/rulemaking/humane-methods-of-livestock-slaughter-act)

<sup>16</sup> Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stockfarming of certain substances having a hormonal or thyrostatic action and of beta-agonists, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC

<sup>17</sup> Scientific Opinion of the Panel on Additives and Products or Substances used in Animal Feed (FEEDAP) on a request from the European Commission on the safety evaluation of ractopamine. *The EFSA Journal* (2009) 1041, 1-52

<sup>18</sup> Poletto R, Cheng HW, Meisel RL, Richert BT, and Marchant-Forde JN. 2008. Effects of ractopamine feeding, gender and social rank on aggressiveness and monoamine concentrations in different brain areas of finishing pigs. In: Boyle L, O'Connell N, and Hanlon A (eds.), Proceedings of the 42nd Congress of the ISAE (Dublin, Ireland: International Society for Applied Ethology, p.83).

<sup>19</sup> Poletto R, Richert BT, and Marchant-Forde JN. 2007. Behavioral effects of “step-up” ractopamine feeding program on finishing pigs. In: Galindo F and Alvarez L (eds.), Proceedings of the 41st International Congress of the ISAE (Merida, Mexico: International Society for Applied Ethology, p. 90).

<sup>20</sup> Poletto R, Rostagno MH, Richert BT, and Marchant-Forde JN. 2009. Effects of a “step-up” ractopamine feeding program, gender and social rank on growth performance, hoof lesions and Enterobacteriaceae shedding in finishing pigs. *Journal of Animal Science* 87:304-13.

<sup>21</sup> Marchant-Forde JN, Lay Jr. DC, Pajor EA, Richert BT, and Schinckel AP. 2003. The effects of ractopamine on the behavior and physiology of finishing pigs. *Journal of Animal Science* 81:416-22.

observed. The drug has also been “associated with an increased number of injured and lame pigs during marketing”.<sup>22</sup>

**World Animal Protection and Humane Society International urge TTIP negotiators to ensure that the standards for pig welfare are harmonised upwards. The more advanced EU standards should be set as a minimal starting point for negotiation on specific animal product categories. Mutual recognition of standards is not an acceptable approach since it requires that one of the Parties accept market entrance for pig meat products that do not meet both animal welfare and public health protection standards imposed on domestic producers. We also recommend that TTIP go further to protect farm animals, specifically on issues relating to housing, painful mutilations, and feeding practices for pigs.**

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<sup>22</sup> FDA. Freedom of Information Summary, Supplemental new drug application NADA 140-863 PAYLEAN 9 and PAYLEAN 45 (Ractopamine Hydrochloride) Type A Medicated Article for Finishing Swine.  
[www.fda.gov/downloads/AnimalVeterinary/Products/.../ucm115647.pdf](http://www.fda.gov/downloads/AnimalVeterinary/Products/.../ucm115647.pdf)